# RAILWAY AGE

THE STANDARD RAILROAD WEEKLY FOR ALMOST A CENTURY

OCTOBER 21, 1950



# How "Roller Freight" cuts operating costs . . . all along the line!

With cars mounted on Timken® tapered roller bearings, class A inspection of journal boxes can be reduced to 1/10 of the man-hours required for plain bearing inspection. Some yards make a class A inspection of a ninety car "Roller Freight" train with four men in less than fifteen minutes!

In addition to the savings in man-hours, "Roller Freight" gives you another big advantage at terminals. Reduced inspection time results in greater utilization of locomotives and increased efficiency of operation.

All along the line, "Roller Freight" will cut your operating costs and allow maximum use of your equipment. And "Roller Freight" is a big plus advantage you can offer shippers. Make it the deciding difference between you and your competition. The Timken Roller Bearing Company, Canton 6, O. Canadian plant: St. Thomas, Ontario. Cable address: "TIMROSCO".

## 6 OTHER WAYS "ROLLER FREIGHT" SAVES OPERATING DOLLARS

1. **IN THE YARDS** . . . More cars are available when they're needed because "Roller Freight" trains travel faster, spend less time in the repair shops.

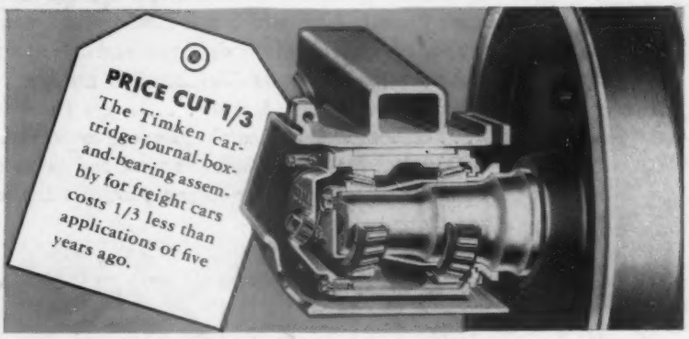
2. **IN THE SHOP** . . . Repair bills are smaller because there's less wear on draft gear and other parts. Impact damage from "serial starting" jolts can be eliminated.

3. **AT FUELING POINTS** . . . Whether it's Diesel oil or coal, you'll use less fuel because "Roller Freight" needs less power to get rolling, less to keep rolling.

4. **ON THE ROAD** . . . Expense and delays resulting from "hot boxes" are practically eliminated.

5. **AT DESTINATIONS** . . . You'll save on damage claims with "Roller Freight". Timken bearings reduce starting resistance 88%—make smoother starts and stops possible.

6. **ANYWHERE!** You can schedule longer trains with "Roller Freight". Locomotives can pull more cars because Timken bearings reduce friction to a minimum, even in cold weather. Full-length trains are possible all winter long!


PRICE CUT 1/3
The Timken cartridge journal-box-and-bearing assembly for freight cars costs 1/3 less than applications of five years ago.

TIMKEN TAPERED ROLLER BEARINGS

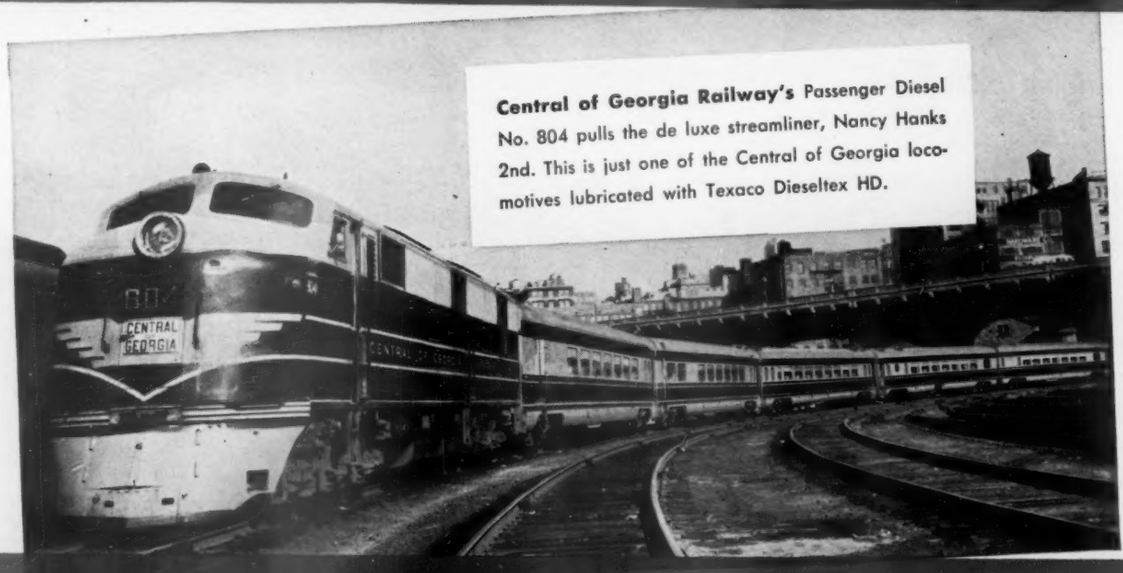
TRADE-MARK REG. U. S. PAT. OFF.

NOT JUST A BALL ○ NOT JUST A ROLLER ⬭ THE TIMKEN TAPERED ROLLER ⬭ BEARING TAKES RADIAL ◎ AND THRUST →◎← LOADS OR ANY COMBINATION →✳←

Texaco Diesel lubrication and service are available in all 48 states.

**RAILROADS PREFER TEXACO**

**More railroad Diesel locomotives in the U. S. are lubricated with TEXACO than with any other brand.**




**Central of Georgia Railway's** Passenger Diesel No. 804 pulls the de luxe streamliner, Nancy Hanks 2nd. This is just one of the Central of Georgia locomotives lubricated with Texaco Dieseltex HD.

# REDUCE FUEL CONSUMPTION

## . . . and reduce maintenance costs by lubricating Diesels with TEXACO DIESELTEX HD

Made especially for railroad Diesel lubrication, *Texaco Dieseltex HD* is designed to keep engines cleaner, assure lower fuel consumption and reduce maintenance costs.

The superiority of *Texaco Dieseltex HD* springs from the exclusive formula from which it is made—plus special heavy-duty additives that are fully detergent and dispersive. Engines lubricated with *Texaco Dieseltex HD* are free of harmful carbon, varnish and gum . . . rings function properly . . . compression and combustion are improved.

*Texaco Dieseltex HD* also minimizes wear and protects bearings against corrosion. Thus engine parts last longer . . . fewer overhauls are necessary . . . maintenance costs come down. *Texaco Dieseltex HD* meets the stringent requirements of leading Diesel locomotive builders.

A Texaco representative will gladly tell you more about this cost-saving Diesel lubricating oil. Just call the nearest Railway Sales office listed below, or write The Texas Company, *Railway Sales Department,* 135 East 42nd Street, New York 17, N. Y.

NEW YORK ★ CHICAGO
SAN FRANCISCO ★ ST. PAUL ★ ST. LOUIS ★ ATLANTA

TEXACO

REG. T.M.

# TEXACO Dieseltex HD

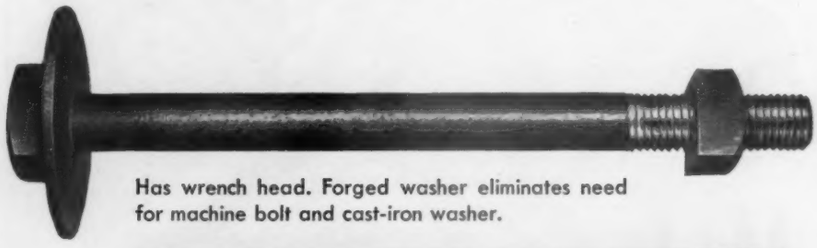
FOR ALL RAILROAD DIESELS


Published weekly by Simmons-Boardman Publishing Corporation, Orange, Conn. Executive Offices, 30 Church Street, New York 7, N. Y. Entered as second class matter at Orange, Conn., under the act of March 3, 1879. Subscription price $6.00 for one year, U. S. and Canada. Single copies, 50 cents each. Vol. 129, No. 17.

# BOLTS FOR BRIDGES AND TRESTLES

When planning a new bridge or trestle, you can count on Bethlehem to supply the fasteners. For Bethlehem turns out a complete line of fasteners for railroad construction and maintenance. For example, take the bridge bolts shown here. They are all products of our Lebanon, Pa., plant, and are made of new-billet steel in both carbon and alloy grades. They are furnished with cut or rolled threads and square or hexagon nuts, either plain or hot-dip galvanized. Call us for details about these or any other items you may have in mind.

**BRIDGE BOLT**

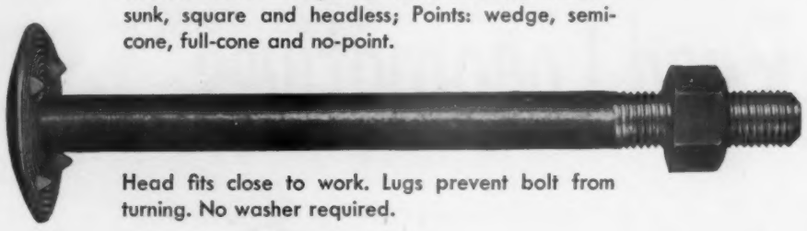


Has wrench head. Forged washer eliminates need for machine bolt and cast-iron washer.

**DRIFT BOLT**

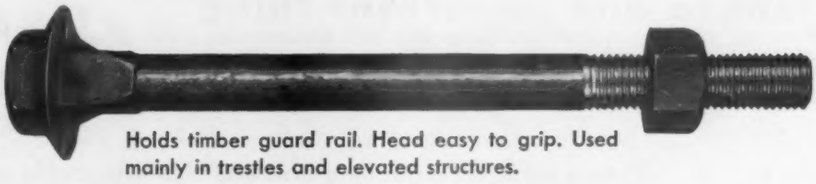
Bodies: round or square; Heads: button, countersunk, square and headless; Points: wedge, semi-cone, full-cone and no-point.

**TIMBER BOLT**



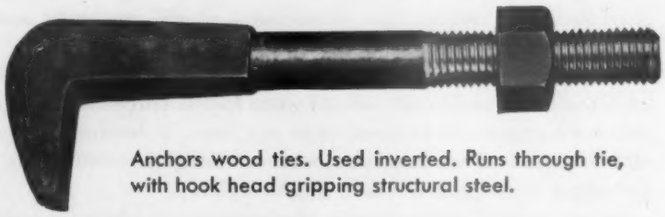
Head fits close to work. Lugs prevent bolt from turning. No washer required.

**TIMBER GUARD RAIL BOLT**



Holds timber guard rail. Head easy to grip. Used mainly in trestles and elevated structures.

**TIE BOLT**



Anchors wood ties. Used inverted. Runs through tie, with hook head gripping structural steel.

★ BETHLEHEM STEEL ★

BETHLEHEM STEEL COMPANY, BETHLEHEM, PA.

On the Pacific Coast Bethlehem products are sold by Bethlehem Pacific Coast Steel Corporation. *Export Distributor:* Bethlehem Steel Export Corporation.

*Bethlehem supplies every type of Railroad Fastener*

# Modern Road Locomotives

**share one important thing between them . . . the 24-RL**

There is one vital piece of equipment that all modern road locomotives have in common—Westinghouse 24-RL Brake Equipment. Combining of various interchangeable sections provides a wide combination of functions, which completely meet the needs of all normal assignments.

The flexibility of the 24-RL is particularly helpful in cases where assignments have not been completely defined when locomotive construction starts. Selected sections can be inserted at any time. Substitutions may be made after locomotives are in service, with no change in basic piping, if changes in assignment make this desirable.

Several typical combinations, which suggest the broad possibilities of the 24-RL, are illustrated and described in Catalog No. 2058. A copy will be sent on request.

**Westinghouse Air Brake Co.**

WILMERDING, PA.

Vol. 129, No. 17 October 21, 1950

# RAILWAY AGE

With which are incorporated the Railway Review, the Railroad Gazette, and the Railway-Age Gazette. Name Registered in U. S. Patent Office and Trade Mark Office in Canada.

Published by
SIMMONS-BOARDMAN PUBLISHING CORPORATION
The House of Transportation and Building
*Publisher of*
Railway Age
Railway Engineering & Maintenance
Railway Mechanical & Electrical Engineer
Railway Signaling & Communications
Car Builders' Cyclopedia
Locomotive Cyclopedia
Railway Engineering & Maintenance Cyclopedia
American Builder
Marine Engineering & Shipping Review
Marine Catalog & Buyer's Directory
Books covering transportation and building

Office of Publication, Orange, Conn. Editorial and Executive Offices at 30 Church Street, New York 7, N. Y., and 79 West Monroe Street, Chicago 3, Ill.

Washington 4, D. C.: 1081 National Press Building—Cleveland 13: Terminal Tower—Seattle 1: 1914 Minor Avenue—Los Angeles 17: 816 West Fifth Street—Dallas 4: 2909 Maple Avenue.

Samuel O. Dunn, Chairman. James G. Lyne, President. J. S. Crane, Vice-President and Secretary. C. Miles Burpee, Harry H. Melville, C. W. Merriken, John R. Thompson, R. E. Thayer, H. E. McCandless, Vice-Presidents. Robert G. Lewis, Assistant to President. Arthur J. McGinnis, Acting Treasurer. Ralph E. Westerman, Assistant Treasurer.

Subscriptions: including 52 regular weekly issues, and special daily editions published from time to time in New York or in places other than New York, payable in advance and postage free — United States, U. S. possessions and Canada: 1 year, $6.00; other countries not including daily editions in Western Hemisphere: 1 year, $10.00; 2 years, $16.00; other countries: 1 year, $15.00; 2 years, $25.00. Single copies, 50 cents each, except special issues.

H. E. McCandless, Circulation Manager, 30 Church Street, New York 7.

## IN THIS ISSUE

### EDITORIAL COMMENT

Compulsory Arbitration of Railway Wages as Well as Rates ..... 13

Why Inflation Is Especially Injurious to Railroad People ..... 14

Two Electrical Sections Become One ..... 15

### GENERAL ARTICLES

New Flat Yard Replaces Two Others ..... 16

Burlington Buys Gallery Suburban Cars ..... 20

What Is the Outlook for Railroad Coal Traffic? ..... 24

Seven Month Purchases Near $1½ Billion ..... 27

Radio Important Among Discussions of Communications Officers ..... 29

Associated Traffic Clubs Hold 27th Annual Meeting ..... 31

### DEPARTMENTS

General News ..... 35

Railway Officers ..... 61

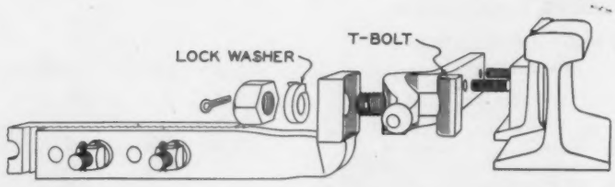
Current Publications ..... 68

Revenues and Expenses ..... 73

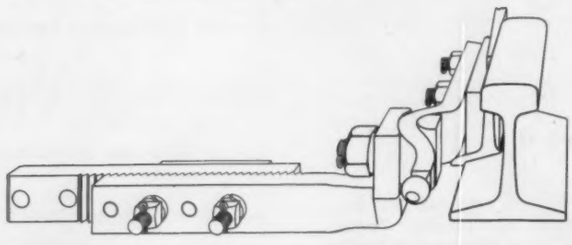
Railway Age is a member of Associated Business Papers (A. B. P.) and Audit Bureau of Circulation (A. B. C.) and is indexed by the Industrial Arts Index and by the Engineering Index Service. Published each Saturday by the Simmons-Boardman Publishing Corporation, Orange, Conn. Printed in U. S. A.

# *Only* "UNION" Swivel Front Rods

## *have these features*



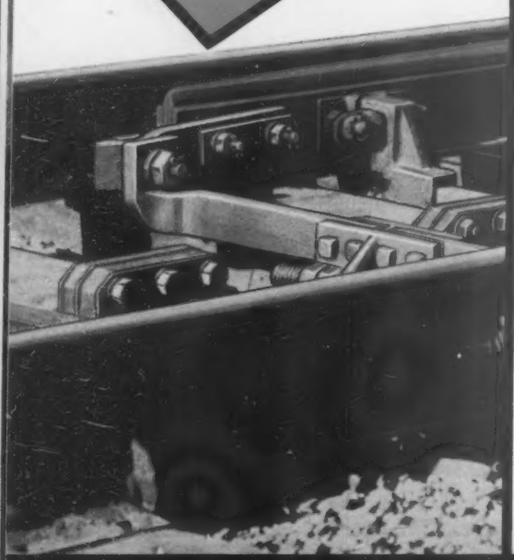

**1** The exclusive T-bolt connection of "Union" Style U Swivel Front Rods assures maximum service life, because wear is effectively minimized by the unusually large contact areas. And, lost motion is prevented by the action of the spring lock washers.



**2** "Union" Swivel Front Rods provide an exceptionally strong connection between switch points . . . hold points vertical . . . yet permit the freedom of motion necessary to limit strain.

• • • • •

Whether you install them . . . at hand-throw, spring, or power switches . . . slip switches or movable-point frogs . . . you can specify "Union" Style U Swivel Front Rods with complete confidence. Their dependability and long life have been demonstrated by the hundreds which have been in service for years.



**UNION SWITCH & SIGNAL COMPANY**

SWISSVALE PENNSYLVANIA

NEW YORK CHICAGO ST. LOUIS SAN FRANCISCO

# WEEK AT A GLANCE

**BUSY TIMES AHEAD:** Judging from the attention which various government agencies are beginning to pay to the railroads' need for freight cars, car builders and specialty manufacturers can anticipate a long period of capacity business. The talk, as reported in our leading News story (page 35) is of hundreds of thousands of cars, in a building program running through 1952 or even 1953.

---

**NEW TOY:** Benevolent old "Uncle Sugar"—who, as everyone knows, has *lots* and *lots* of money—has just bought another new toy for one of his favorite kiddies—commercial aviation. The toy—a little gadget called the "omnirange"—is described in the News pages. By contrast, of course, when the I.C.C. tells the railroads to put in more signals, the railroads pay for them—even if it means doing without something they could use to much better advantage.

---

**STOP THE SPIRAL:** Inflation, while it may hurt almost everyone, does particular damage to the railroads and to the people who depend upon them for jobs and markets. Why this is so is simply and clearly demonstrated in our page 14 editorial—which continues to show that railroad people have imperative reason for doing everything they can, no matter how great an effort it may require, to stop the inflationary spiral which so many people seem bent on building higher and higher.

---

**NEWS NOTES:** September gross 21.2 per cent above 1949.—Nickel Plate to make 5-for-1 stock split?—7,000 more new freight cars for New York Central.—Post office department asks I.C.C. for rate increase on parcel post, but not up to express level.—Government arbitrator named to settle wage-hour dispute between Canadian railroads and non-operating employees.—Yarlott heads dining car officers.—H. K. Porter sells locomotive business to Davenport-Besler.—Central Vermont celebrates centennial at St. Albans.—Pressed Steel Car appoints R. T. Coyne vice-president-laminate structure sales.

---

**WHAT ABOUT COAL TRAFFIC?** How will the rapidly growing use of other fuels—particularly oil and natural gas—affect the coal traffic which has always contributed such an important (and, for some companies, critical) part of railroad revenue? Some of the answers to that question—answers which are far more encouraging than recent history would suggest—are contained in a recent study which is summarized on pages 24-26.

---

**NEARING THE $1.5-BILLION MARK:** Given a big boost by July equipment orders aggregating nearly $165 million, total railroad purchases from January 1 through July 31 fell just short of $1.5 billion. Equipment orders for 1950's first seven months, at $544.5 million, are almost six times corresponding orders for the comparable period of 1949. That's more than sufficient to offset the fact that buying of other items through July 31 was less than last year—natural enough, of course, in view of the lower traffic levels which prevailed during about the first half of this year. As a result, total seven-month buying is about 25 per cent above that of a year ago—which means that the full year 1950 is virtually certain to set new dollar records, if, in fact, it has not already done so. For detailed figures through July, see pages 27-28.

---

**COMPULSORY ARBITRATION:** Since the railroads are subject to compulsory arbitration of their rates by the I.C.C., what reasonable argument can be advanced, under present conditions and prospects, against application of the same policy to the wages which consume more than half of the gross earnings derived from those rates? Discussion of that question is the topic of our leading editorial (page 13).

---

**PUTTING TWO INTO ONE:** That's what the D.&R.G.W. has done at Denver, where it has combined two small freight yards into a single new 18-track classification yard. The results, as summarized in the first paragraph of the illustrated description of the new facility beginning on page 16, are considerably better than those obtained from the old layout. Construction News columns, incidentally, report plans for other new yards, one to be built by the Pennsylvania just south of New York, and one by the Southern near Birmingham.

---

**NEXT WEEK:** *Railway Age's* 1950 Passenger Progress Issue, reviewing a half century of achievement in railroad passenger transportation.

---

**"SEATS IN THE GALLERY":** That's likely to become a common phrase among Burlington commuters, now that the road is receiving from the Budd Company 30 new-type, air-conditioned, center-entrance suburban cars, which can seat 145 or 148 passengers on two levels. The new cars are both described and illustrated in the article which starts on page 20.

---

**COMMUNICATIONS; TRAFFIC:** The fall convention season may be drawing to a close, but it's by no means over. This week, at French Lick, Ind., members of the A.A.R. Communications Section spent three days discussing continuing progress in development and maintenance of modern railway communications systems. And this week also, but at New York, members of the Associated Traffic Clubs of America considered ways and means of preserving free enterprise. Accounts of the two meetings begin, respectively, on pages 29 and 31.

Taken at Youngstown, Ohio.

# LIMA-HAMILTON SWITCHERS

...on the

ERIE

"Sixteen of our locomotives are Lima-Hamilton diesel-electrics. These switchers are performing satisfactorily and are producing savings in operations and maintenance . . . "

*says the Erie*

LIMA HAMILTON CORPORATION

**LIMA-HAMILTON CORPORATION** **LIMA, OHIO**

*Lima Locomotive Works Division*

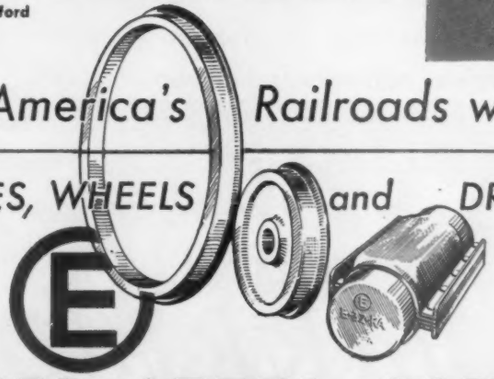
**Railroad Dependability** —By Hungerford

We will be glad to send you enlarged copies of this Hungerford cartoon (without advertising copy) for posting on your office and shop bulletin boards, or a cut for your company magazine, at cost.

Watch for other railroad cartoons by Mr. Hungerford


Serving America's Railroads with

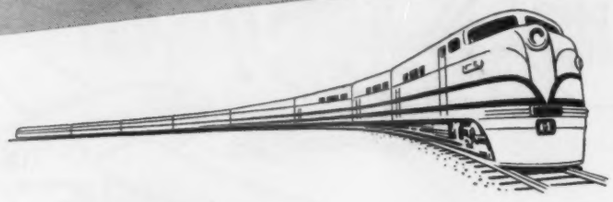
ROLLED STEEL TIRES, WHEELS and DRAFT GEARS



EDGEWATER STEEL COMPANY

P. O. BOX 478 · PITTSBURGH 30, PA.

# More Time Hauling
# Less Time Overhauling



Holding a Diesel's coolant and lubricating oil within proper temperature limits is essential to maximum performance and economy. Because Harrison radiators and oil coolers do their work effectively and reliably, they contribute greatly to the efficiency of Diesel operation ...help establish the outstanding "availability" record of Diesels. Today, the majority of American Diesel locomotives are Harrison-equipped.

HARRISON

**DIESEL RADIATORS AND OIL COOLERS**

**HARRISON RADIATOR** DIVISION OF **GENERAL MOTORS CORPORATION, LOCKPORT, N. Y.**

# Have you looked at your Snubbers lately?

Old freight car trucks with faulty snubbers are rough on your *pocketbook*, too. Rejuvenate these veterans, now, and you'll be money ahead.

It's a matter of record that Simplex Snubbers give the *smoothest ride* it is possible to get from an AAR Coil-Snubber Grouping. *That's* the kind of performance you want.

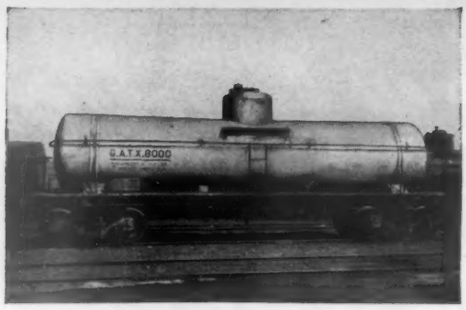
Five simple, rugged parts—all visible for quick inspection—interlock to form a *long-lasting* unit, easily installed. Thus, convenience is combined with economy.

Give your old cars a *new lease on life*. Install Simplex Unit-Type Snubbers. It's an investment that not only pays for itself, but earns a *profit* for you!

## SIMPLEX *unit-type* SNUBBERS

AMERICAN STEEL FOUNDRIES

MINT MARK OF ○ FINE CAST STEEL



The first aluminum tank car ever built was produced by General American in 1928. It was GATX 8000—built specifically for Glacial Acetic Acid.

# GATX *aluminum cars for chemicals*

modern **GATX** aluminum cars now carry:

**Glacial Acetic Acid • Formaldehyde**
**Hydrogen Peroxide Bleach • Fatty Acids**
**Acetic Anhydride • Naphthenic Acid**
**Butylaldehyde • Water White Rosin**
**Glycerin • Nylon Salt Solution**
**52% Hydrogen Peroxide • Nitrogen Fertilizer**
**Oleic Acid • Nitric Acid**
**Trichlorobenzene • Ammonium Nitrate**

Bulk shipping keeps pace with chemical progress

***why aluminum cars?***

**Before GATX 8000, the action of many ladings damaged and corroded tank cars; or the lading itself was contaminated by iron "pick-up."**

GATX GENERAL AMERICAN TRADE MARK

**GENERAL AMERICAN TRANSPORTATION CORPORATION**
135 South LaSalle Street • Chicago 90, Illinois

DISTRICT OFFICES: *Buffalo • Cleveland • Dallas • Houston • Los Angeles New Orleans • New York • Pittsburgh • St. Louis • San Francisco Seattle • Tulsa • Washington*

EXPORT DEPT. *10 East 49th Street, New York 17, New York*

# COMPULSORY ARBITRATION OF RAILWAY WAGES AS WELL AS RATES

It began to become plain some years ago, and is now plainer than ever, that one of the most imperative and pressing duties of Congress is to pass legislation providing new means of settling labor disputes and preventing strikes on the railways.

Because of disputes that could not be, or at least had not been, settled by means now available, the railways already were under government control when the labor unions announced recent demands for advances in wages which make their total demands now pending about $900 million annually. This largely exceeds the net operating income earned by the railways in 1949.

The railways are under government control now because some unions threatened to strike rather than accept the findings of government boards, appointed by President Truman under the Railway Labor Act, regarding a part of present demands. As it has apparently become standard practice for the unions to reject the findings of such boards, it seems futile to try any longer to effect settlements by the process prescribed by the Railway Labor Act.

### *Complete Mobilization Must Include Railways*

The huge demands now being made by the unions are, with the international situation what it is, of vital importance to the nation. It is evidently the purpose of the government, backed by public sentiment, to carry out as rapidly as possible complete mobilization, military and industrial, to prevent or prepare for a third world war. This mobilization to be completely effective must include complete mobilization of the railways. Experience in World War II demonstrated that only railways can provide the vast mass transportation, passenger and freight, essential, first, for complete military and industrial mobilization, and second, for carrying on modern war. And complete mobilization of the railways will require the rapid expenditure of billions of dollars in the improvement and expansion not only of equipment but also of roadway and structures.

Before the nation entered World War II the railways had a surplus capacity which had been created by the large capital expenditures made principally during the prosperous decade 1921-1930. Even during the long depression, while their equipment inventory was declining, their capacity was being increased by expenditures on roadway and structures, which helped them to handle their equipment with such unprecedented efficiency during World War II. The severity of freight car shortages has been enhanced by the large increase in traffic since the war in Korea began—from 783,000 carloads in the week ended July 1 to 880,000 in the week ended Septem-

PUBLISHER . . .
Samuel O. Dunn
EDITOR . . .
James G. Lyne
MANAGING EDITOR . . .
C. B. Tavenner
WESTERN EDITOR . . .
William H. Schmidt, Jr.
NEWS & FINANCIAL EDITOR . . .
Gardner C. Hudson
WASHINGTON OFFICE . . .
Walter J. Taft
Joe W. Kizzia
ELECTRICAL DEPARTMENT . . .
Alfred G. Oehler
TRAFFIC & TRANSPORTATION DEPARTMENT . . .
Robert G. Lewis
John W. Milliken
John S. Gallagher, Jr.
MECHANICAL DEPARTMENT . . .
C. B. Peck
E. L. Woodward
H. C. Wilcox
C. L. Combes
G. J. Weihofen
ENGINEERING DEPARTMENT . . .
M. H. Dick
Henry E. Michael
Norris V. Engman
Radford E. Dove
PURCHASES & EQUIPMENT . . .
Fred C. Miles
SIGNALING AND COMMUNICATIONS DEPARTMENT . . .
John H. Dunn
Maurice Peacock
WESTERN NEWS DEPARTMENT . . .
Arthur M. Cox, Jr.
ASSOCIATE EDITOR . . .
Charles Layng
LIBRARIAN . . .
Edith C. Stone
EDITORIAL ASSISTANT . . .
Elaine C. Farrar

ber 30—but there had been freight car shortages for months before that.

The railways are carrying out a large program of buying new and repairing old locomotives and cars; but they have not been making the proportionately large expenditures on the improvement and expansion of roadway and structures which must be made if the tracks, yards and terminals used in moving, breaking up and making up trains are to be kept equal in efficiency and capacity to those locomotives and cars.

### *Whence the Capital for Railway Mobilization?*

The capital required for increasing adequately the efficiency and capacity of both equipment and the facilities with which it is handled must be forthcoming from some source or sources. It cannot come from net operating income without a large advance in rates if operating expenses are to be increased by the granting of any such demands as the labor unions are now making.

This calls attention to a paradoxical and menacing fact about the situation with which the railways are confronted. The rates they charge are fixed by *legal government compulsion;* but the wages they pay are now fixed principally by *labor union compulsion* backed by the threat of strikes. Some of the results of this labor union compulsion have been that average annual compensation per employee increased from $1,886 in 1939 to $3,709 in 1949, or 97 per cent, and that the percentage of gross earnings paid out in wages increased from 48 per cent in 1939 to 53½ per cent in 1949. Employees got this increase in their share of gross earnings, because while gross earnings increased from $3,995 million in 1939 to $8,580 million in 1949, or 115 per cent, the total railway payroll increased from $1,921 million to $4,592 million, or 139 per cent.

### *Voluntary Settlement of Disputes Destroyed*

The Railway Labor Act, which was passed with the support of both labor unions and railways, provided a *voluntary* means of settling labor disputes, either by collective bargaining, voluntary arbitration or the findings of boards appointed by the President of the United States. As this voluntary means of settling disputes has been completely broken down by refusal of the labor unions to arbitrate or to accept the findings of presidential boards, it has become plainly necessary for Congress to adopt some *compulsory* means of settlement—either compulsory arbitration or, as proposed by the Donnell bill, by a requirement that both parties to disputes shall accept the findings of presidential boards.

The railways are subject to *compulsory arbitration of their rates* by the Interstate Commerce Commission. What reasonable argument can be advanced, under present national and international conditions and prospects, against application of the same policy to wages which consume more than half of the gross earnings derived from rates?

## WHY INFLATION IS ESPECIALLY INJURIOUS TO RAILROAD PEOPLE

Inflation—the declining purchasing power of the dollar—injures everybody except a few wily, or lucky, speculators. But, more than anybody else, it hurts the railroads and the people who depend upon the railroads for jobs and a market for their products. This can easily be demonstrated—

When inflation occurs—that is when the price of everything bought or sold, including hourly wages, rises—all the expenses of providing railroad service increase proportionately. Specifically, it costs the railroads more money to buy and maintain rolling stock. It costs more to operate trains, to do necessary bookkeeping, to solicit traffic, to maintain and improve tracks and signaling.

What happens, meantime, to highway transportation and water transportation? A *part* of their expenses go up too—but only a part. Their fuel and equipment maintenance costs rise, probably, at about the same rate as the increase in costs on the railroads. They have to pay higher wages to their operating crews, just as the railroads do. But their expense of providing and maintaining roadway increases little or not at all.

### *Restating the Problem*

Take the canalized rivers, for instance. The actual cost of dredging and otherwise improving the inland waterways probably went up about as much from 1940 to 1950 as the cost of maintaining railroad roadway and track—but the operators of barges were not burdened with this increase in cost, because they do not pay anything for the use of the inland waterways. Thus, inflation boosts all the costs of railroad service, but it increases only a part of the cost of providing inland waterway service—and leaves the railroads competitively weaker, compared to inland waterway transportation, than they were before.

Expressed algebraically, if vehicle operation cost is $a$, equipment cost is $b$, and roadway cost is $c$—then the total cost of railroad service, before inflation, may be said to equal $a+b+c$; and the cost (to the operator) of inland waterway service is $a+b+0$ (since the waterway operator does not contribute to roadway costs). If inflation comes along and reduces the purchasing power of the dollar by 50 per cent, then the cost of railroad service becomes $2a+2b+2c$, while the cost of waterway service is only $2a+2b+0$.

If $a$, $b$ and $c$ each equal $1,000, then the cost of a given unit of railroad service is $3,000, prior to inflation, while the cost (to the operator) of waterway service is only $2,000—a margin in favor of the waterway operator of $1,000. After inflation, the cost of this hypothetical unit of railroad service becomes $6,000 and that of the waterway operator $4,000, doubling the price advantage which the waterway operator enjoys in competing for traffic against the railroad.

The actual cost figures differ, of course, from the arbitrary ones used here—but the principle remains the same whatever the actual figures may be. The operation of price inflation cannot fail to work competitively to the disadvantage of a transportation agency which has *all* of its costs inflated, and in favor of the agency which is spared suffering from inflation in a part of its costs.

The same situation applies to highway transportation. The operators of trucks make their contribution (such as it is) to roadway costs in the form of license fees and gasoline taxes. Inflation of the actual cost of building and maintaining highways, in all probability, was as much from 1940 to 1950 as the inflation which occurred in building and maintaining railroad roadway and track. But how many states are there where the gasoline taxes, and the per-mile license fees of a truck hauling 15 tons of pay-load, are double in 1950 what they were in 1940?

Now, once more, inflation is marching upward. It should not stretch the imagination too much to figure out what the process is going to do to the railroads competitively, if the purchasing power of the dollar should shrink as much from 1950 to 1960, as it did in the decade 1940 to 1950.

Railroad employees and suppliers have as much at stake in arresting this ruinous course as railway owners have—in fact they have a greater interest, because the owners have already been to a large degree expropriated.

### *Cure for Inflation*

What can railroad people do to stop, or at least diminish, the inflationary trend? Aside from political effort to require that rival agencies of transportation be assessed with *all* their roadway costs, the most effective effort railroad people can exert is toward the end of halting inflation itself. The way to halt inflation is to do everything possible to prevent the volume of money and credit available for spending from growing faster than the growth in production.

When an increasing amount of spending money finds itself in people's hands—with no corresponding increase in goods available for sale—eager buyers are bound to bid up prices. If war production is to grow fast enough to provide adequately for national defense, the production of a lot of civilian goods must diminish. The way to control the demand for such diminished supplies of goods is to apply lusty excise taxes to them—to syphon off the excess cash to finance the military effort.

The very worst means of curbing inflation—indeed one of the best means of encouraging it—is the politically popular "excess profits" tax, which ignites an inflammatory demand for all kinds of goods and services—simply because there is no incentive to economy where the man who practices it has to pay over almost everything he saves to the tax collector. If inflation is to be stopped, the weight of taxation should lie—not on large earnings but on large spending, especially that for goods and materials which are in competition with the defense program. How ridiculous, for example, that there should be a 15 per cent excise tax on railroad coach fares, with so many coaches running at a fraction of their capacity, while no such excise tax (i.e., purely for government revenue, as contrasted with the financing of "federal aid") applies to automobile transportation.

If everybody who is injured by inflation were to oppose it, then inflation would be stopped. The trouble is that, as with alcoholism, it is hard to get the victims to realize that they are being injured until it is too late to save them. Hard as the effort is, though, railroad people have a special and imperative reason for putting forth that effort—first, to understand where their own interest lies, and then to convince others of the soundness of their convictions.

---

## TWO ELECTRICAL SECTIONS BECOME ONE

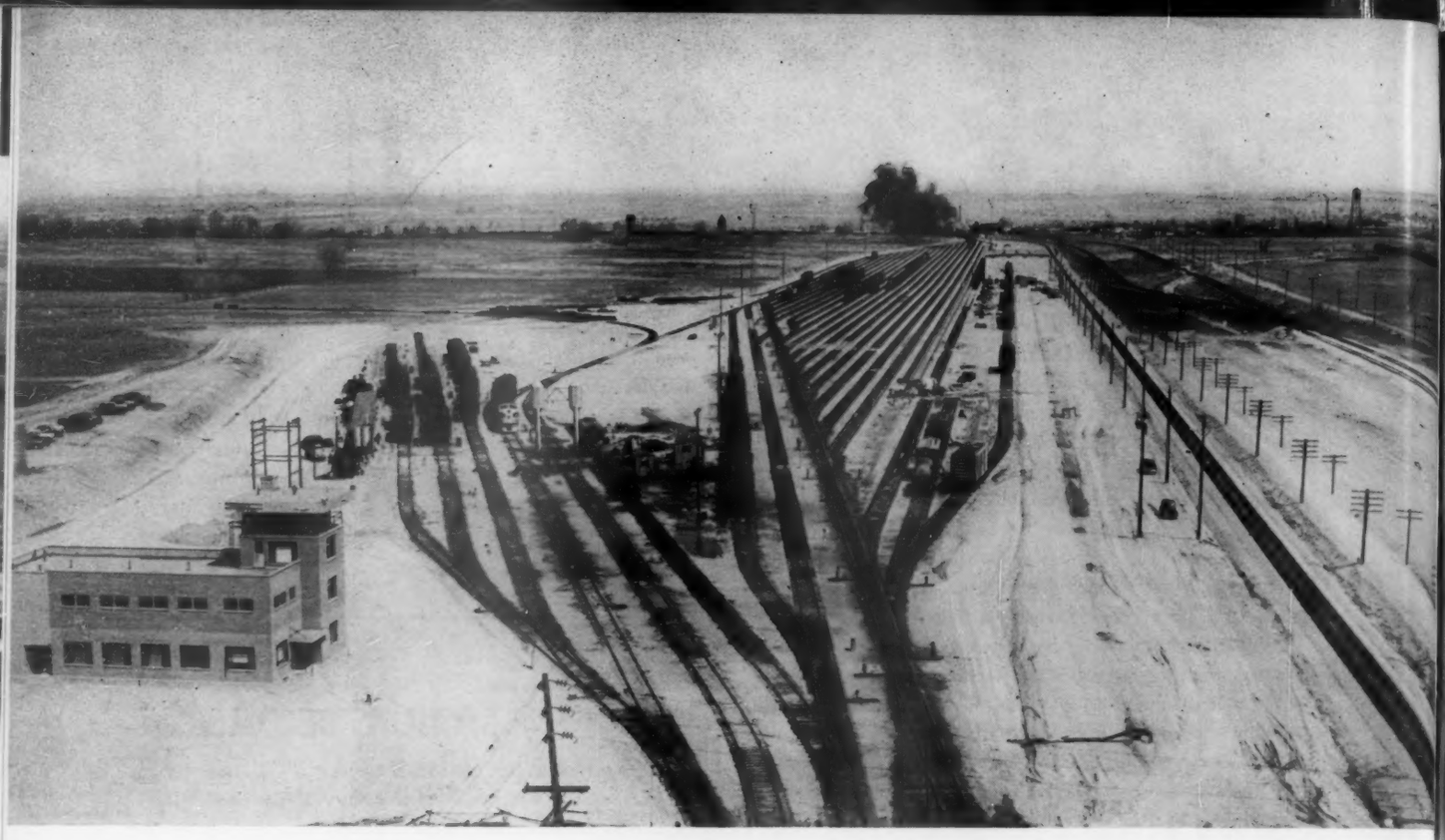
At the recent joint annual meeting of the Electrical Section of the Engineering Division of the Association of American Railroads and the Electrical Section of the association's Mechanical Division, the members of the two bodies present, acting separately, voted unanimously in favor of combining and becoming the Electrical Section, Mechanical and Engineering Divisions, A.A.R.

The reason for the action is pretty obvious to those familiar with the situation. The amount of electrical equipment in railroad service has increased enormously in the past few years. The rate of increase has been so fast that much work by some railroad organization is essential to establish standards and practices and prevent chaos. The situation is further complicated by the fact that mechanical and engineering department officers and men, with little or no electrical background, have been obliged to familiarize themselves with new and strange equipment. This has called for education of a kind needed by practical railroad operators.

Both Electrical Sections have made an enviable record for making important studies and producing comprehensive reports on subjects of current and vital interest. There is no other body which is in any position to take on the work that must be done. It is, therefore, necessary to provide the new consolidated section with means for doing the work.

Following the return of letter ballots sent out to all members of the Electrical Section, Engineering Division, the decision to effectuate the change will rest with the A.A.R. It will evidently require the employment of a full-time secretary. This will mean some added expense, but the savings to member roads resulting from the consolidation undoubtedly will more than offset this cost, since considerable duplication of work and traveling time of railroad officers and employees will be dispensed with.

It is quite apparent too, that the present use of electrical equipment is only an indication of what it will be a few years hence. If the organization change is made effective now, many potential difficulties can be avoided.



# New Flat Yard Replaces Two Others

***Rio Grande speeds up delivery of local, interchange and through shipments at Denver***

By replacing two small freight yards at its terminal at Denver, Colo., with an 18-track freight classification yard of the flat-switching type, the Denver & Rio Grande Western has obtained some important operating advantages. The new yard permits quicker handling of industrial business in that area, which results in a substantial reduction of per diem payments, and also has eliminated a number of switch-engine shifts. It has decreased the time required to deliver stock to the stockyards as well as for the return of the empty cars, thereby improving service to shippers and increasing the availability of stock cars during peak movements. It facilitates the interchange of cars, thereby advancing the departure time of trains of one connecting road by an hour and of another connecting road by 4 hours 30 minutes. It makes maximum tonnage possible for all departing trains, with a decrease in train-miles and a large decrease in helper miles.

In addition to 18 freight-classification tracks, other tracks and servicing facilities were included in the new yard. These include an engine run-around track, rip tracks, a wye track, a scale track, "hold" and team tracks, a modern icing station and service track, car-repair and Diesel-locomotive servicing facilities, a new yard office, floodlights, two electrical substations, and communication facilities.

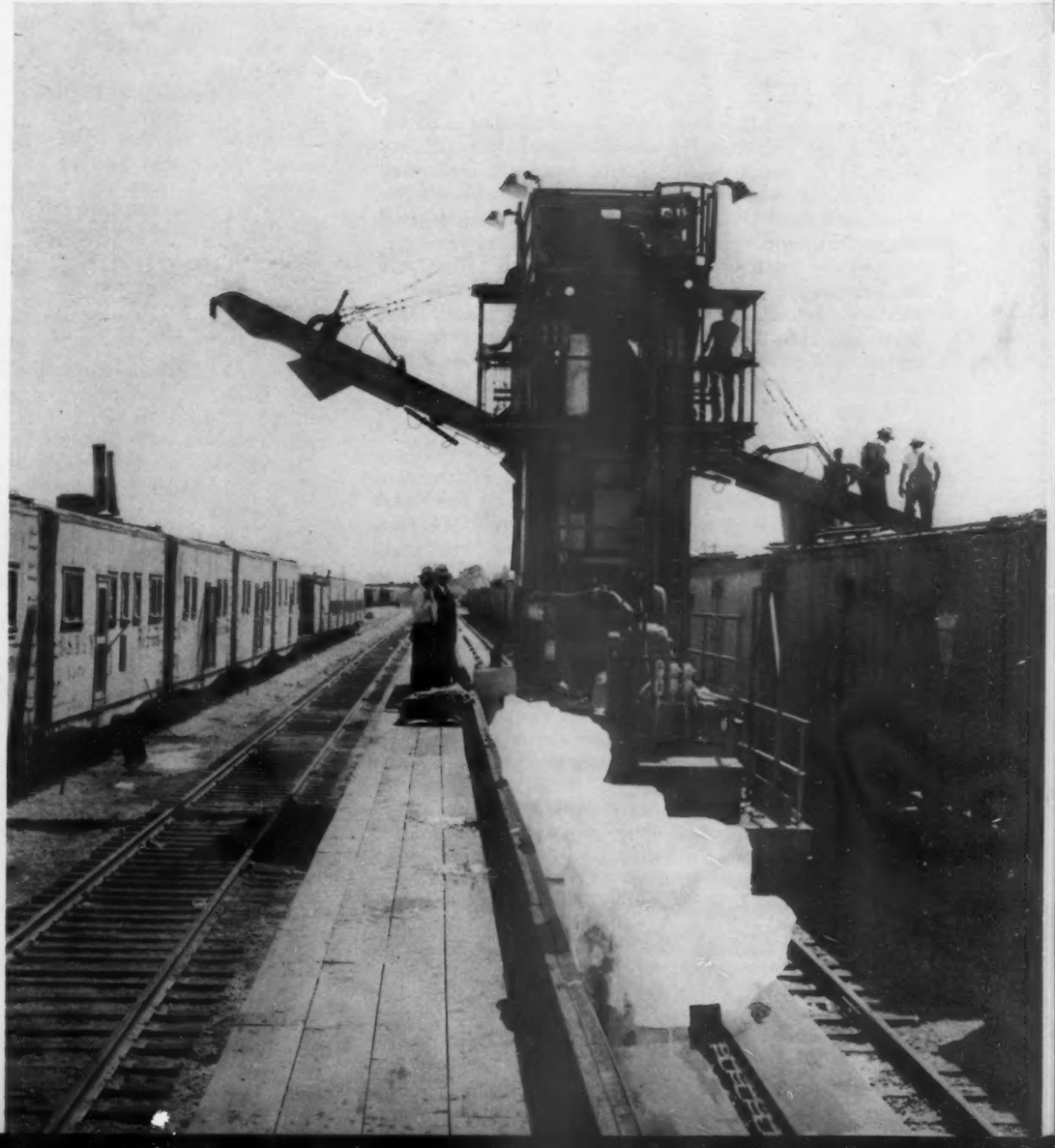
The property on which the new yard was constructed in a north-south direction comprises about 200 acres lying west of the main track and between the two yards it replaced. Part of the existing main line at this location was single track and part double track. The double-track portion was torn up and the single track was rehabilitated, necessitating a raise in grade of a maximum of 3 ft. for about three-fourths of a mile opposite the new yard. To make way for the new yard, a branch of one of the connecting roads, which crossed the yard area near its midpoint, was removed. Two new main tracks were then constructed, using 115-lb. rail and fastenings, north of the new yard for about one mile to another point of connection with the foreign branch line, and the connecting road was given operating rights over this double-track portion.

Approximately 210,000 cu. yd. of excavation were involved in the construction of the new yard, and of this quantity 170,000 cu. yd. were used as fill. The resulting yard subgrade slopes down from west to east on a 0.4 per cent grade. It also slopes down from the south end to the center of the yard on a 0.19 per cent grade, and down from the north end to the center on a 0.4 per cent grade. The yard was constructed in a "saucer" shape partly to give sufficient grade to the yard tracks to prevent cars from rolling out of the yard after being

Facing page — Looking north from the top of a 117-ft. floodlight tower at the new 18-track flat-switching yard of the Rio Grande at Denver. On the left is a part of the wide drainage ditch constructed around the entire west side of the yard

Above—Diesel-servicing and rip-track facilities were provided at the south end of the yard

Right — A 3,600-ft. ice dock and two Rico Master car-icing machines serve either crushed or slinger ice to cars standing on either of the two 80-car icing tracks



switched. A drainage ditch, 16 ft. wide and 4 ft. deep, was excavated around the entire west side to collect all water flowing down the natural grade from points west of the yard. The water is then carried under the yard through two 48-in. corrugated metal culverts.

### *Other Construction Features*

After the yard had been graded, the entire surface over which trackage was to be built was covered with 7 in. of pit-run gravel having a maximum size of ¾ in. The portion of the yard upon which trackage was not constructed was covered to a depth of 4 in. with pit-run gravel. The gravel was hauled in by truck and dumped in piles at predetermined locations, after which a bulldozer spread the piles and a motor-patrol unit finished the leveling work.

After the various tracks had been staked out, the motor patrol was used to plough a trough approximately 9 ft. wide on the alinement of each track, leaving the gravel at a depth of 4 in. The first long track was then built, the ties being hauled in trucks and placed by hand in the trough. The rails and other track material were also brought in by truck and unloaded beside the ties, after which a Burro crane was used to lay the rail. When the first track had been constructed, a work train was operated on it to distribute the ties, rail and other track material for the next track.

The 18 tracks comprising the body of the yard range in length from 4,600 ft. to 1,700 ft. and have a total capacity of 1,200 cars. These tracks were constructed at 14-ft. centers with the exception of two 80-car icing tracks, one being built on each side of a 3,600-ft. icing dock. The total trackage of the yard, including the various service tracks, is 60,000 ft. The total length of the yard, throat to throat, is one mile, and the yard was arranged to permit future expansion to give more than double the present capacity. Two 3,000-ft. yard-entrance tracks were built at the south end and one 5,000-ft. lead at the north end.

The two long icing tracks were built with 110-lb. rail, the next four tracks with 100-lb. rail, and the remainder of the yard tracks with 90-lb. rail. The rail and all other track material, except the spikes, are secondhand material. A total of 91 switches was either installed or replaced. Of these turnouts, 2 are of the No. 15 equilateral type, placed where the double-track mains converge to a single track at each end of the yard, 2 others are No. 11, 35 are No. 10 and 52 are No. 8½.

A scale track, 1,150 ft. long, was built just west of the run-around track with the track scale at the center of it. This track gives a weighing capacity of 11 cars. For holding peach diversion cars that are expected to accumulate during the peach season, two "hold" tracks, 2,000 ft. long, were constructed between the yard and the main track, extending from the south end of the yard toward the icehouse. These latter tracks can also be used as team tracks for the small amount of unloading that may be necessary at this yard.

One of the outstanding features of the new yard is its modern icing facilities which were built near the midpoint of the yard length between the main track and the longest yard track. These facilities include an icehouse with a storage capacity of 16,000 tons, an icehouse office building, a long ice dock, two Link-Belt Rico Master car-icing machines,* two salt-storage houses, and an ice machine track.

The icehouse is a three-room building, 96 ft. by 290 ft., constructed entirely of fire-retardant and rot-resistant treated wood with the exception of the concrete floor and the asbestos-cement siding. The wall construction consists of 3-in. by 10-in. by 30-ft. studs sheathed on each side with two layers of 1-in. shiplap with vapor barrier paper between layers. The 10-in. space between the sheathing is filled with rock wool and the asbestos-cement siding on the exterior faces of the walls was placed over sisal kraft paper. The ceiling is 3-in. by 8-in. shiplap laid on 8-in. by 16-in. joists at 8-ft. centers carried on 9-in. by 18-in. beams, and overlaid with an 8-in. layer of rock wool. The roof, covering an attic leaving an average depth of 4 ft., is a 20-year built-up type on 2-in. shiplap laid on 6-in. by 6-in. rafters at 8-ft. centers. The attic space is ventilated entirely around the building with louvered openings in addition to 20 aluminum ventilators in the roof.

It was decided that it would be impossible to get ice out of the three rooms in sufficient quantities to ice two peach trains simultaneously, so a daily storage room, 12 ft. wide, 9 ft. high and running the full length of the building, was built on the ice-track side of the house. With the added space made available by the daily storage room, ice can be taken out of the house continuously. During periods between trains, a readily available reserve supply can be built up, thus allowing the crews in the house proper to work steadily. Two spiral chutes descend from the storage room to tunnel conveyors which convey the ice laterally and up inclined conveyors to the ice dock.

Natural ice is used, which is obtained from ponds in the mountains. Initially the cakes are 23 in. square and between 16 and 20 in. thick. Generally, this ice is delivered in January in whatever types of cars are available. The pieces are unloaded opposite each of the three rooms from the first icing track into the daily storage room. Thence they pass up an inclined conveyor in the center of each room and unload at the proper elevation.

The ice dock, constructed of treated timber, was built between the two icing tracks and is 6 ft. wide, 6 ft. high and 3,600 ft. long. The two Rico Master car-icing machines run on a track laid between the dock and the second ice track. The machines take ice from a conveyor on the ice dock, crush and elevate it to the top of the machine, whence it is chuted down to cars standing on either track. Salt is automatically mixed with the ice at the chutes in the proportion desired, and a supply is stored at both ends of the dock in salt houses. The icing machines also carry slingers for the body icing of cars. The capacity of the crusher and elevator of each machine is 18 cakes a minute.

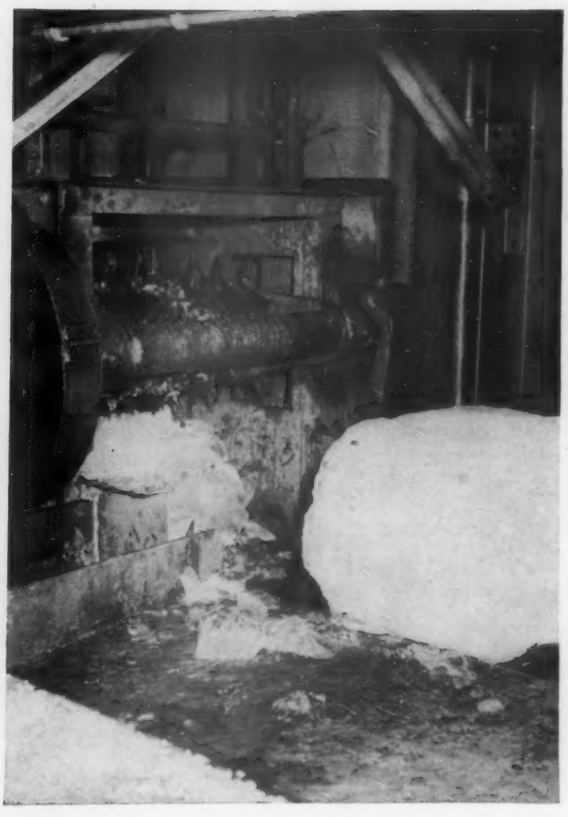
A small one-story office building was constructed about 100 ft. south of the icehouse for the use of the ice inspectors, and for housing a tool room and a storage room used in connection with the icehouse operations.

### *Yard Office Has Tower*

A yard office building was constructed near a main road at the south end of the new yard. This is a two-story building, with basement, built of brick and terra cotta, with the interior walls faced with glazed tile. It is 75 ft. long and 35 ft. wide and has a four-story communication tower, 20 ft. square, on the southeast corner. A heating plant, a compressor for a pneumatic-tube system, and signal and communication facilities are located in the basement. The lower floor provides office space for the yardmaster, the engine dispatcher and the necsssary associated personnel, and the second floor has locker and shower facilities for the operating personnel. The

*A detailed description of the Rico Master car icer was published in the April 15 *Railway Age*. The two machines on the Rio Grande were described in the September 16 issue.

The yardmaster's observation tower is 36 ft. above ground at one corner of the new yard office



Cakes of natural ice are fed by the dock conveyor into the crushers of the icing machine

ground floor is heated by hot-water radiation and convection and the locker room with unit heaters. The entire building is air conditioned. A pneumatic-tube system extends between a telegraph office and all other principal yard offices.

The observation-control room in the tower is 36 ft. above the ground and provides an uninterrupted view of the entire yard. It also houses the controls for paging and talk-back speaker units, as well as a radio and yard-track indicator. The yard-track indicator was installed at the north throat of the yard with the control equipment on the yardmaster's table. This permits the yardmaster, by manipulation of the switches on his table, to flash any number between 1 and 18, indicating the proper track for an incoming eastbound train to head-in on, thus averting the necessity of calling the dispatcher before entering the yard.

### *Other Yard Facilities*

Three rip tracks, a small office building and shop, and a 100-hp. electric air compressor were provided for the mechanical department forces near the south end of the yard. The office building and shop are furnished with gas, hot and cold water and electricity, and suitable power outlets are provided in the rip-track area for the use of electric tools and welding machines. Compressed air is distributed at a pressure of 90 lb. per sq. in. over the rip-track and yard areas for testing on the rip tracks and for charging train lines prior to departure.

Four 117-ft. floodlight towers were installed, equipped with 5 to 9 floodlights per tower. There is a tower at each end of the yard and another on each side of the midpoint of the yard. The floodlights are arranged to illuminate the main body of the yard, but with the highest degree of intensity concentrated on the leads, the ice dock, and the areas surrounding the yard office and rip tracks.

Two transformer substations were constructed, both being served by common metering equipment. One substation furnishes power to the icehouse and associated facilities, and the other substation, located between the rip tracks and the yard office, furnishes power to that area.

The connecting primary line between the two substations was built and is owned by the railroad. One substation has a capacity of 450 kva. and the other 250 kva.

Diesel locomotive servicing facilities are located in the area of the three rip tracks. These servicing facilities include a 70,000-gal. fuel-oil storage tank, two service tracks between which fuel outlets and water hydrants are located, two sand towers and other sand-storage space, an oil pumphouse, a small building for lubricating oil storage, and another building for caboose supplies.

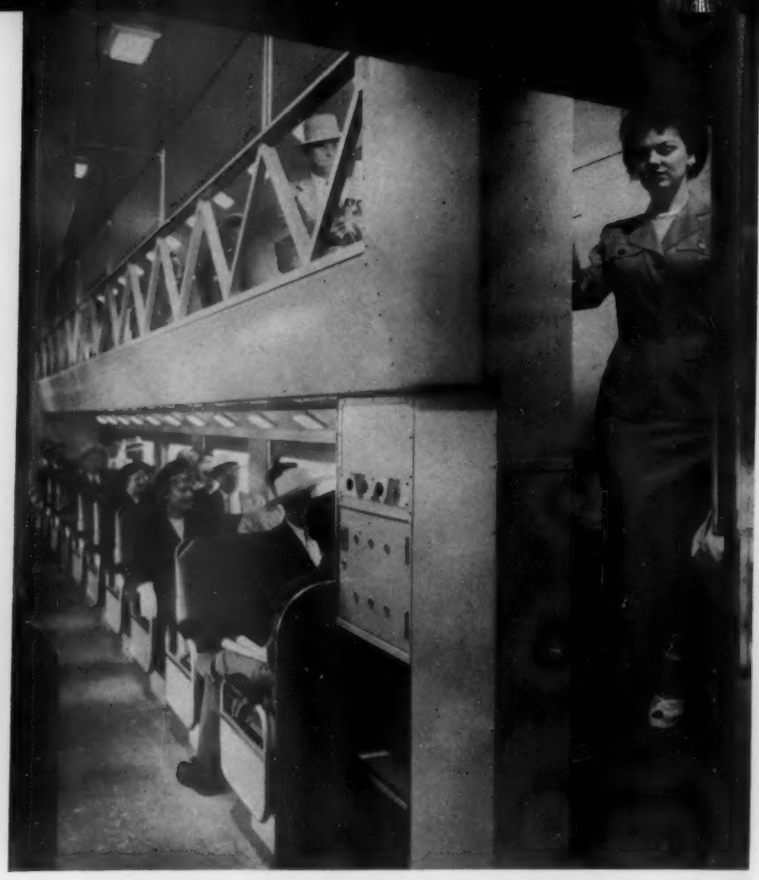
Since the new yard lies within the limits of an existing C.T.C. system, changes were necessitated in the control machine to conform with the revised main track and new yard layouts. These changes involved the installation of 11 power switches at the north end of the yard and 5 power switches at the south end of the south leads.

The new yard was built under the general direction of K. L. Moriarty, chief engineer of the Rio Grande. The changes in the C.T.C. system were designed and installed under the direction of B. W. Molis, signal engineer, and the communications were planned and installed under the direction of W. W. Pulham, superintendent of communications.

# Burlington Buys Gallery Suburban Cars

***Each of 25 Budd-built units seats 148 passengers—Five seat 145 each —All are air conditioned and have center vestibules with pneumatic sliding doors—Brakes are HSC***

The Chicago, Burlington & Quincy is receiving a lot of 30 gallery-type suburban cars which are being built by the Budd Company, Philadelphia, Pa. The cars are of two arrangements: 25 are without toilets and seat 148 passengers; each of the other five cars is provided with a toilet room and the seating capacity is 145 passengers.



**Looking toward the end of the car**
*(Photo courtesy Hedrich-Blessing Studio)*

The cars are built of stainless steel, assembled by the Budd Shotweld process. The construction follows the current standard of the builder in which the side structure serves as the shear members and the roof and floor as the chord members of a modified plate girder. Center sills, floor and roof are of stainless steel. The end underframe units, including draft-sill extensions, and the body bolster are of arc-welded alloy steel, completed with an alloy cast-steel end sill and coupler-carrier support. There are no skirts below the side sills, except where they form a smooth, curved connection between the vestibule step well and the side of the car.

### *Vestibules and Steps*

The vestibule and steps are in the middle of the car body, from which passengers enter either half of the car. Passengers are seated on two levels, with double seats on the main floor and single seats in the galleries. Compact stairways on each side of the car adjoin both sides of the center vestibule, leading from the aisle entrance to the galleries over the main-floor seats. A passageway, protected by a railing, extends alongside the single seats in each gallery.

The car floors in the seating space are of plywood. The lower floor is ½ in. water-resistant material, secured directly by blind rivets to the tops of the flanges of the stainless-steel subfloor structure. The gallery floors are 1 in. plywood, faced on both sides with metal. The floors on both levels are covered with 3/16 in. rubber tiles. The vestibule floor and steps, the gallery stair steps and landings, and the floor inside the car up to the partition at the first seats are made of stainless-steel anti-slip plates.

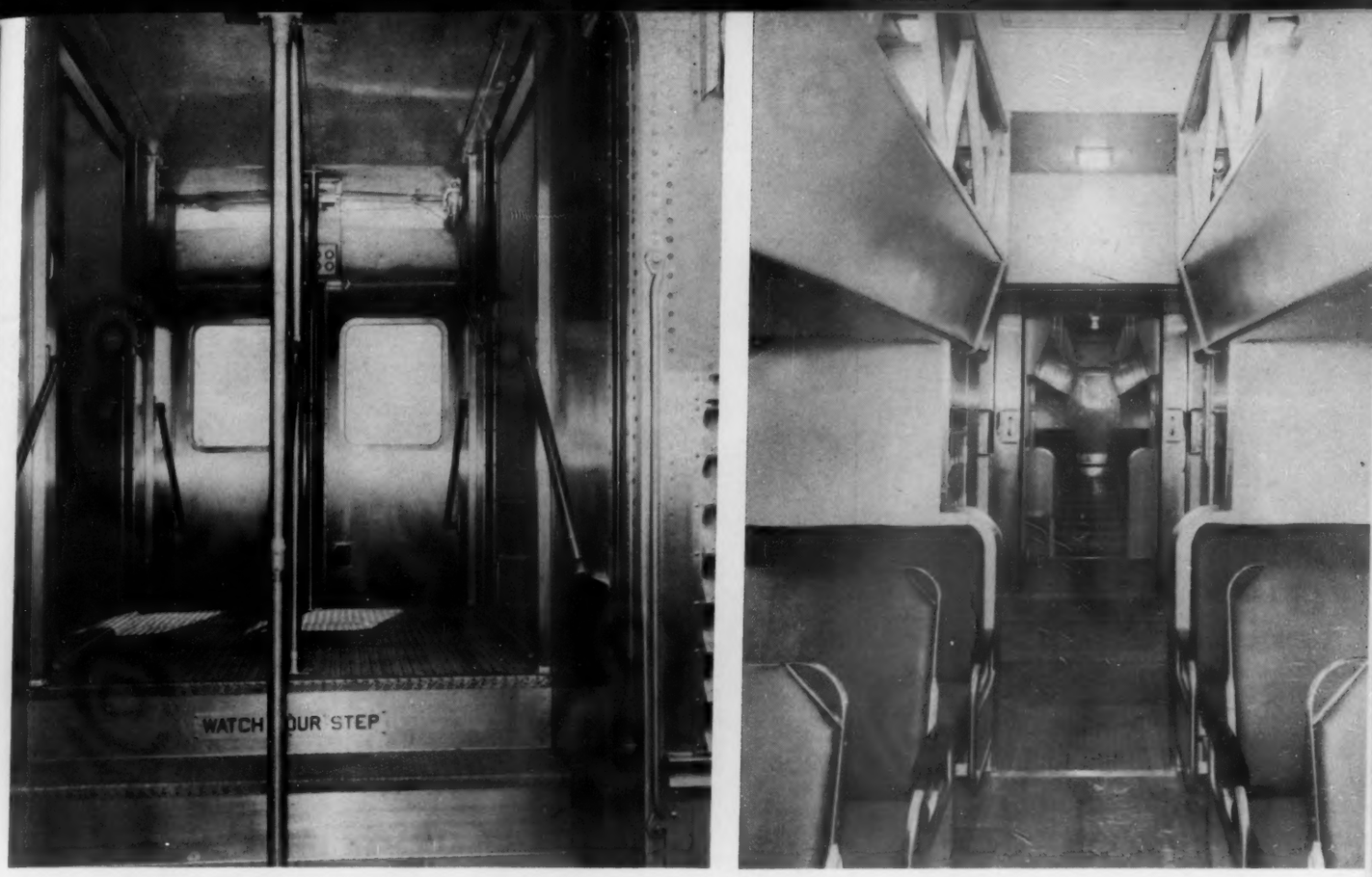
## HOW LONG ARE COMMUTERS?

**One day during the latter part of August, Burlington commuters were greeted at their accustomed train seat by a small white leaflet which asked in bold type, "Who are the 25 longest-time Burlington commuters?"**

**The idea of the inquiry was to have the road's senior commuters present as special guests aboard a demonstration run of the new gallery coaches. Above the coupon which entrants were requested to hand to any train or station employee, were the "rules" of the contest—anyone who had ridden the Burlington's suburban trains continuously for more than 25 years was eligible. As it turned out, Passenger Traffic Manager A. M. Cotsworth, Jr., had underestimated the average age of his "daily except Sunday" patrons, for a minimum of 45 years of riding was found to be necessary to join the "Top 25."**

**More than 300 replies were volunteered by the commuters. The youngest of the 25 riders who were finally selected boarded his first Burlington suburban train in 1905, close on the heels of six other "newcomers" who joined the ranks in the same year. Others bought their first ticket shortly after the turn of the century, among these being two women. The first ten places were all held by veterans who began their trips in the 19th century. There was no question as to who merited the number one position on the roster; Dr. John B. Palmer, a Riverside, Illinois, dentist has been riding on the Burlington's suburban service longer than almost any employee of the road can remember. His first ticket was purchased in 1887.**

**The 25 veterans rode in the new gallery coaches on a special press run on September 6. One could see by the way their practiced eyes studied the gleaming interiors that subtle changes in the art of commuting were in the offing. There wasn't a long face in the crowd.**




**The vestibule. (Left) Side doors are operated pneumatically, the end doors manually. (Right) Looking through the vestibule. Air-conditioning evaporators and blowers are located above the vestibule ceiling**

The gallery floor is supported at the side wall by brackets welded to the side posts and on the aisle side by truss members which serve also as the hand rail. Columns extend up from the truss panel points and are secured at the top to the roof structure to give lateral stiffness to the railings. The gallery structure is thus supported entirely from the side of the car and from the railing trusswork that is supported by the partitions at each end of the gallery.

All insulation in the car bodies is Ultralite, 3 in. thick throughout in roofs, sides, ends and floor. Asbestos paper is applied on the under side of the roof insulation. The insides of the side and end walls of the passenger compartments are covered with sound-deadened aluminum. Aluminum is also used on the ceiling of the passenger occupancy sections of the car.

There are two rows of six wide windows on each side of each half of the car, the upper row opening to the gallery and the lower to the main floor. Windows are of the double-glazed breather type with ¼ in. laminated safety glass inside and ¼ in. polished plate glass outside. Window shades are of the cable type with roller curtains.

The step wells are of the fixed type and are closed at the outside of the car by bi-parting sliding doors which extend down to the tread of the bottom step. These are operated by National Pneumatic door engines from switches in a box attached to the vestibule wall above the stanchion just inside the passenger entrance opening. These switches are arranged so that the buttons control the opening and closing of a group of cars from a single station.

Body end doors are also of the sliding type and are fitted with weather stripping. The inside aisle doors between the center vestibule and each passenger compartment on the lower floor are bi-parting sliding doors. These are manually operated and are provided with holders to retain the doors in the open position. The doors remain closed without a latch.

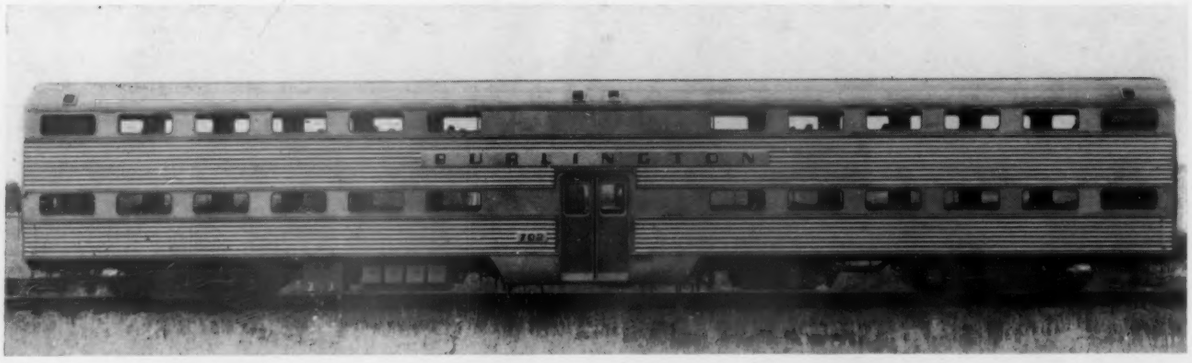
There are 12 walkover type double seats along each side of the aisle in each half of the car. In each gallery are 11 single seats similar to the double seats on the main floor, except that there is no arm rest on the aisle side. At the end of each gallery against the end wall of the car is a fixed double seat. Seat cushions are of hair and spring construction, with padded back cushions. Upholstery is of plastic material.

There are no parcel racks above the double seats on the main floor of the car. Under three of the gallery stairs in each car, however, is a space approximately 18 in. by 30 in. for luggage shelves. The control and switch lockers are housed in the similar space under the fourth stairway. In the gallery continuous closed-type parcel racks are placed along each side of the air distribution duct over the center aisles.

### *Air Conditioning and Heating*

Each car is equipped with two Waukesha propane-driven ice engines and two overhead Trane evaporators. Each overhead unit has a capacity of 6½ tons and is equipped with supplementary heating coil and blower. The heating coil is removable without disturbing the cooling coil. The evaporator and blower units are located above the ceiling over the center entrance vestibule.

Fresh air enters the car through four screened openings in the sides of the roof above the entrance doors. It passes through two Farr filters inside each opening




**Burlington stainless-steel gallery-type suburban car**

before entering the plenum chamber. Each blower has a capacity of 2,400 cu. ft. per min., of which 600 cu. ft. is fresh air. The air is discharged into the upper level from the central overhead duct. It passes through branch ducts at each end of each compartment to longitudinal ducts underneath the gallery floor, from which it is discharged through slotted openings. Air is forced out of the car through two grills in the car sides at each end which discharge through two static-type ventilators.

The cars are heated by fin-tube floor radiators along the sides on both levels, controlled by Vapor single-tube thermostats. The cooling thermostats have three settings: 71-73 deg.; 74-76 deg., and 78-80 deg.

### *Electrical Equipment*

These cars receive their electric power supply from generators mounted on a power car directly behind the locomotive. Distribution is through a loop system train line of three wires, suitable for transmission of 61-volt d.c.

The battery is an Exide type MVAHT-13 of 213 amp. hr. nominal capacity at the eight-hour discharge rate. It is used only for ice-engine starting and layover heat control. All lighting is incandescent. The lighting of the passenger space in the car is by center ceiling lights and by reading lights over each seat.

### *Four-Wheel Trucks*

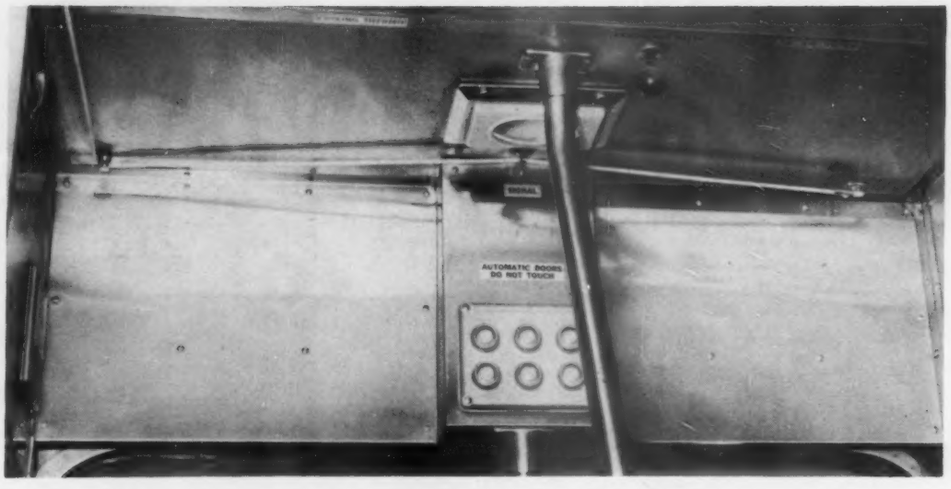
The cars are carried on four-wheel trucks with a wheel base of 8 ft. 6 in. Frames and bolsters are alloy-steel castings. The single equalizers are forged. Bolsters have roll stabilizers and longitudinal anchor rods. All springs are helical and Houdaille shock absorbers are applied at the ends of the bolsters. Journals are 6 in. by 11 in., fitted with Timken roller bearings and wheels 33 in. in diameter of high-carbon rolled steel. Treads are semi-cylindrical. Rubber pads are placed between the center plates, under the side bearings and at the ends of the bolsters. Rubberized fabric pads are placed between the ends of the equalizers and the tops of the journal boxes.

---

**PARTIAL LIST OF MATERIALS AND EQUIPMENT ON THE C. B. & Q. GALLERY-TYPE SUBURBAN CARS**

| | |
|---|---|
| Underframe assembly | Youngstown Steel Car Corp., Niles, Ohio |
| Blind rivets | Cherry Rivet Co., Los Angeles, Calif. |
| Wheels and axles | Standard Steel Works Div., Baldwin Locomotive Works, Burnham, Pa. |
| Journal bearings and boxes | Timken Roller Bearing Co., Canton, Ohio |
| Swing hanger pins | Manganese Steel Forge Co., Philadelphia, Pa. |
| Truck frames, bolster and roll stabilizer | General Steel Castings Corp., Granite City, Ill. |
| Shock absorbers | Houdaille Hershey Co., Houde Engineering Div., Buffalo, N. Y. |
| Truck center pin | W. H. Miner, Inc., Chicago |
| Sound deadening | J. W. Mortell Co., Kankakee, Ill.<br>United States Rubber Co., New York |
| Coupler and uncoupling mechanism | National Malleable & Steel Castings Co., Cleveland, Ohio |
| Draft gear | Waugh Equipment Co., New York |
| Draft gear yoke | National Malleable & Steel Castings Co., Cleveland, Ohio |
| Side stem bumper pads | Fabreeka Products Co., Boston, Mass. |
| Air brakes, hose and couplers | Westinghouse Air Brake Co., Wilmerding, Pa. |
| Brake shoes; brake-shoe keys | American Brake Shoe Co., New York |
| Truck brakes | American Steel Foundries, Chicago |
| Hand brakes | National Brake Co., New York |
| Insulation—roof, sides, ends, floor | Gustin-Bacon Manufacturing Co., Kansas City, Mo. |
| Waterproof adhesive | Acorn Refining Co., Cleveland, Ohio |
| Vestibule flooring | Alan Wood Steel Co., Conshohocken, Pa. |
| Vestibule enclosures— inner diaphragm, canvas | Morton Manufacturing Co., Chicago |
| Vestibule curtains, side | Morton Manufacturing Co., Chicago |
| Metal-covered plywood—partitions and doors | Haskelite Manufacturing Co., Grand Rapids, Mich.<br>Met-L-Wood Corp., Chicago |
| Windows; window-shade mechanism | Adams & Westlake Co., Elkhart, Ind. |
| Window glass | Pittsburgh Plate Glass Co., Pittsburgh, Pa. |
| Window shade material; Interior surface | Collins & Aikman Corp., New York |
| Exterior surface | Ionna Western Mills Co., New York |
| Door engine | National Pneumatic Co., Rahway, N. J. |
| Door closer (5 cars only) | Yale & Towne Manufacturing Co., Stamford, Conn. |
| Locks, general hardware, etc. | H. S. Getty & Co., Philadelphia, Pa.<br>Loeffelholz Co., Milwaukee, Wis.<br>Rostand Manufacturing Co., Milford, Conn.<br>Yale & Towne Manufacturing Co., Stamford, Conn. |
| Coach seats | (20 car sets, including five cars with toilets) S. Karpen & Bros., Chicago<br>(10 car sets) Coach & Car Equipment Co., Chicago |
| Seat coverings | (15 car sets) Goodall Fabrics, Inc., New York<br>(15 car sets) B. F. Goodrich Co., Akron, Ohio |
| Paints | Pittsburgh Plate Glass Co., Pittsburgh, Pa. |
| Underfloor paint primer | Interchemical Corp., Finishes Div., Newark, N. J. |
| Batteries | Electric Storage Battery Co., Philadelphia, Pa. |
| Wire and cable | Okonite Co., Passaic, N. J. |
| Train line receptacles and jumpers | Pyle-National Co., Chicago |
| Air conditioning system; evaporators and blowers | Trane Co., La Crosse, Wis. |
| Fuel cabinets, ice engines | Waukesha Motor Co., Waukesha, Wis. |
| Fuel cylinders | Pressed Steel Tank Co., Milwaukee, Wis. |
| Fresh-air filters | Farr Co., Los Angeles, Calif. |
| Recirculated air grills; door grills | Barber-Colman Co., Rockford, Ill. |
| Heating system and control panels | Vapor Heating Corp., Chicago |
| Blind rivets (piping, brackets, etc.) | Clarke Equipment Co., Buchanan, Mich. |
| Steam train-line and steam-line insulation | Johns-Manville, New York |
| Fire extinguishers | Phister Manufacturing Co., Cincinnati, Ohio |
| Hoppers | Dayton Manufacturing Co., Dayton, Ohio |
| Paper holders | Scott Paper Co., Chester, Pa. |

**In the gallery. Parcel racks are under the ceiling between the galleries**




**Buttons for opening and closing the vestibule side doors**

The trucks have clasp brakes of the Unit-cylinder type. A lever type hand brake mounted on a collision post at one end of the car operates through the clasp brakes on the one truck adjacent to the brake.

The air brakes are of the modified H.S.C. type with pneumatic control, furnished by Westinghouse. The braking ratio, based on the ready-to-run weight, is 150 per cent at 100 lb. cylinder pressure. Provision is made for the later application of the straight-air pipe.

In order to permit operation of the angle cock without going under the end of the car, there is a loop in the end of the brake pipe. In this loop is located the angle cock, thus bringing it close to the side of the car.

The cars are fitted with tightlock couplers and Waugh-mat draft gears. The ends of the cars have face plates of stainless steel and single-fold inner diaphragms. A canvas boot at the bottom of the diaphragm aids in closing the openings at each side of the foot plate.

There are four schemes of interior decoration. All employ tan and cream for walls and ceilings, and rust and green window shades. In two, the seat covering is plastic upholstery in green and the floor tiles green and ivory, or rust and ivory marbleized. The others have plastic upholstery in rust and rust and ivory, or green and ivory floor tiles.

The cars are 85 ft. in length, coupled, have a maximum height above the rail of 15 ft. 8 in., and weigh 132,380 lbs., each, ready to run.

# What Is the Outlook For Railroad Coal Traffic?

***Growing use of competing fuels has not yet meant an actual loss of coal tonnage—Future outlook for coal more favorable than recent history would suggest***

*Photo by Parks, Standard Oil Co. (N. J.)*

What are the near-term and long-range prospects for the railroads that depend on coal traffic for a critical part of their revenues? What will be the effect on railroad coal traffic of the rapidly growing use of competing fuels—natural gas and oil—and to what extent do price advantages and interruptions in supply influence the increasing popularity of these fuels? Such questions are of vital importance to several major railroads, to their managements and employees and owners. Particularly timely, then, is a recent study* appraising objectively the factors affecting the relative competitive position of the nation's principal sources of energy—coal, gas and oil—and suggesting what the effect will be on the principal coal-carrying railroads of developments in that competitive situation.

Although the overall energy requirements of the country increased nearly 24 per cent from 1926 to 1949, this study shows, the demand for the solid fuels (bituminous and anthracite coal) declined about 22 per cent, while that for coal's competitors (oil, gas, and hydroelectric power) nearly tripled. The net effect of these changes is that the solid fuels are contributing a continuously smaller proportion of the total energy supply. The combined ratio of bituminous and anthracite coal has dropped from almost 80 per cent of the total in 1926 to less than 50 per cent in 1949.

### *Relative Loss—Absolute Gain*

In spite of the loss in *relative* position over the last 25 years, however, the *actual* consumption of bituminous coal in the war years and in two of the postwar years exceeded that of 1926, the previous peak year of consumption. While bituminous coal in 1949 accounted for the smallest *proportion* of total fuel requirements on record, the actual *tonnage* consumption of bituminous coal was greater in 1949 than in any year in the 1931-1939 period, when coal was contributing three-fifths of the energy supply. In other words, it is quite possible for coal to decline in its relative importance in the overall energy requirements of the country and at the same time show an actual tonnage increase in use.

The attrition which had been going on slowly during the two decades prior to World War II has been accelerated since the termination of hostilities. In the four postwar years, bituminous coal consumption declined by 126,000,000 tons (1945-1949) as compared with a decline in the fourteen years prior to the war period (1926-1940) of 92,000,000 tons. The recent sharp loss in tonnage may be attributed to three important factors over which the coal industry has little control: (1) The expansion of natural gas pipe lines into coal's market; (2) the increasing competition with fuel oil because of price factors; and (3) Dieselization of the railroads.

Analysis of a wide range of statistical data, significantly interpreted in the light of such coming events as can be foreseen and appraised, even conditionally, at this time, leads the analysts preparing this study to the following conclusions:

1. The impact of the expansion of the natural gas

*Competing Fuels and Railroad Coal Traffic, prepared by the Railroad Research Department of R. W. Pressprich & Co., 48 Wall Street, New York 5. Price, $2.50.

industry may be felt more by the oil industry than by the coal industry, with the greatest adjustment occurring in 1951.

2. The total displacement of coal throughout the country may not exceed 10 per cent of the 1949 level of consumption based on heat values of increased deliveries of natural gas and probably will not exceed 5 per cent, after allowing for the estimated displacement of oil. The estimated potential coal tonnage displacement because of new natural gas deliveries in the next three years is substantially less than the annual changes in consumption resulting from fluctuations in business activity.

3. The competitive position of the three fuels (excluding the home heating market) is determined almost entirely by relative price. On a price basis, coal cannot compete with natural gas, but the limited availability of natural gas in coal's territory limits the extent of inroads by natural gas. Price relationships with oil fluctuate from year to year, depending on conditions within both the oil and coal industries. At present the price of coal is becoming more competitive with that of residual oil, through both a weakening in the price structure of coal and a firming in the price of heavy oil.

### *Consumption Predictions*

4. Trends in consumer demand for coal:

(a) Railroad consumption of coal will continue to decline with probably more adverse implications for the coal mining industry than for the railroad industry since it is largely non-revenue producing tonnage for the railroads.

(b) Electric utility consumption of coal could increase with the expansion of the industry and with the price spread between coal and oil narrowing. Railroads carrying a substantial volume of coal destined for utility companies for use in their boilers may, in general, count on no further loss than that experienced to date because of conversions to oil, while roads serving the plants in the Middle West may well see further increases in tonnage as a result of plant expansions.

(c) Metallurgical coals will be in continued demand and be an increasingly important segment of the coal industry's sales as long as the current high rate of steel activity continues. At present this market is not vulnerable to any inroads from competing fuels. Railroads moving a large volume of coal to steel plants are in a preferred position, the study indicates.

(d) The home heating market of the coal industry is vulnerable to further losses, particularly in the southeastern section of the country where soft coal is burned extensively and where conversion to natural gas may be accomplished with relatively little expense. Railroads serving this section of the country as well as those serving the home heating market west of Chicago are described as particularly vulnerable with respect to this tonnage.

(e) Demand for coal by large industrial users will fluctuate with both industrial activity and price relationships with oil, as well as with the availability of natural gas on an interruptible basis. Railroad tonnage losses will depend on the type of industrial customers located along the line.

(f) Further losses in both the overseas market and the Canadian market may be experienced. The tidewater roads were the primary beneficiaries of the unusual postwar export movement and have felt the decline in this market to the greatest extent. However, losses subsequent to 1950 may not be so drastic. The eastern roads handle the greater part of the coal destined for the Canadian market, but this tonnage is relatively small by comparison with all other types of their coal traffic.

(g) Total coal consumption will be influenced largely by the demand from the steel industry (coke ovens) and the utility industry. The study is optimistic on the outlook for coal demand from both of these industries over the longer term.

**TABLE I—PRIMARY CONSUMERS OF BITUMINOUS COAL**
**(Millions of Tons)**

| Source of Consumption | 1929 | 1940 | 1941 | 1944 | 1946 | 1947 | 1948 | 1949* |
|---|---|---|---|---|---|---|---|---|
| Railroads—All Classes | 131.1 | 91.0 | 103.2 | 136.3 | 113.0 | 112.8 | 99.8 | 72.0 |
| Electric Power Utilities | 39.7 | 49.1 | 59.9 | 76.7 | 68.7 | 86.0 | 95.6 | 80.7 |
| Coke Ovens | 85.8 | 81.4 | 93.1 | 105.6 | 83.6 | 105.1 | 107.5 | 91.6 |
| Steel & Rolling Mills | ** | 10.0 | 10.9 | 10.7 | 8.6 | 10.1 | 10.0 | 7.5 |
| Cement Mills | 9.1 | 5.6 | 6.7 | 3.7 | 7.0 | 7.9 | 8.5 | 7.9 |
| Other Industrials | 248.1 | 113.0 | 108.0 | 135.1 | 106.1 | 134.7 | 121.9 | 86.5 |
| Retail Dealers | ** | 87.7 | 97.5 | 124.9 | 100.6 | 99.2 | 89.8 | 90.3 |
| Bunker Foreign Trade | 4.3 | 1.4 | 1.6 | 1.6 | 1.4 | 1.7 | 1.1 | .9 |
| Total Consumed in U. S. | 519.1 | 439.3 | 481.0 | 594.6 | 488.9 | 557.4 | 534.2 | 437.3 |
| Exports | 17.4 | 16.5 | 20.7 | 26.0 | 41.2 | 68.7 | 45.9 | 27.9 |
| Total Consumption | 536.5 | 455.8 | 501.7 | 620.6 | 530.1 | 626.1 | 580.1 | 465.2 |
| Total Production | 535.0 | 460.8 | 514.1 | 619.6 | 533.9 | 630.6 | 594.0 | 435.0 |

*Preliminary
**Breakdown not available; data included in "Other Industrials."
Source: Basic Statistics from Bituminous Coal Institute.

**TABLE II—PER CENT PRIMARY CONSUMERS TO TOTAL U. S. CONSUMPTION**

| | 1929 | 1940 | 1941 | 1944 | 1946 | 1947 | 1948 | 1949* |
|---|---|---|---|---|---|---|---|---|
| Railroads—All Classes | 25.2% | 20.8% | 21.4% | 23.0% | 23.1% | 20.2% | 18.7% | 16.5% |
| Electric Power Utilities | 7.6 | 11.2 | 12.4 | 12.9 | 14.1 | 15.4 | 17.9 | 18.5 |
| Coke Ovens | 16.7 | 18.6 | 19.3 | 17.8 | 17.1 | 18.9 | 20.1 | 20.9 |
| Steel & Rolling Mills | ** | 2.3 | 2.3 | 1.8 | 1.8 | 1.8 | 1.9 | 1.7 |
| Cement Mills | 1.8 | 1.3 | 1.4 | .6 | 1.4 | 1.4 | 1.6 | 1.8 |
| Other Industrials | 47.0 | 25.0 | 22.1 | 22.2 | 21.6 | 24.2 | 22.8 | 19.7 |
| Retail Dealers | ** | 20.0 | 20.2 | 21.0 | 20.6 | 17.8 | 16.8 | 20.7 |
| Bunker | 1.7 | .8 | .9 | .7 | .3 | .3 | .2 | .2 |
| Totals | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

*Preliminary
**Breakdown not available; data included in "Other Industrials."
Source: Basic Statistics from Bituminous Coal Institute.

5. Based on the foregoing and allowing for a maximum possible displacement of coal by natural gas by 1953 of 43,000,000 tons, it is the analysts' opinion that total coal consumption will not fall below 400,000,000 tons and that 425,000,000 tons may be a more likely minimum level. On an average it would seem possible to anticipate an annual consumption of 450,000,000 tons over the next five years.

On the basis of these estimates, the study concludes that the extreme pessimism prevalent in many quarters today, on the outlook for the coal industry and for the coal-carrying railroads does not seem to be justified.

### *Competition with Trucks*

Although the railroads handled over four-fifths of the total coal produced in 1948, their proportion of the total has been declining over the last 20 years. This is due almost entirely to the sharp increase in the truck movement, the analysts report. In 1948 trucks hauled almost 10 per cent of the nation's output as compared with a negligible amount at the beginning of the 1930

decade. The greatest concentration of trucked tonnage is in Pennsylvania where trucks hauled about 19,000,000 tons or 14 per cent of the state's 1948 output; in Kentucky, 8,000,000 tons were hauled by trucks or 14 per cent of the output; and in Ohio, 8,300,000 tons or 21 per cent of the output. The current trend for states to restrict the maximum load of the trucks may have a retarding influence, over the longer term, on any further substantial increases in the volume of trucked tonnage. By contrast with the increasing movement over the highways, the waterways have shown relatively little gain in coal traffic and do not appear to the analysts to be as great a threat to the coal traffic of the railroads as the trucks.

Not only have the railroads lost coal traffic to competing forms of transportation, but they have also felt the effect of shifts to competing fuels. A further shift may occur in the next three-year period with the completion of major new natural gas pipe lines into northern markets. It is impossible to determine exactly how much loss each of the roads will suffer, but the study suggests that the relative vulnerability of the major coal roads will be influenced in large part by the following:

1. The extent to which originated coal moves to consumers who can choose between competing fuels, or who are located in areas where greater competition between fuels is in prospect;

2. The ability of mining companies located on the line to find new customers for volume lost to competing fuels; and

3. The extent to which the opening up of new mine areas secures for a railroad a greater proportion of the total coal originations of the country or serves to offset losses resulting from "worked out" mines.

All of the roads handle coal for each type of consumer and to a certain extent their vulnerability to loss from inroads by competing fuels is influenced by the importance of the types of coal in the total composition of their tonnage. For instance, the market for metallurgical coal is a non-competitive one, both because there is presently no substitute for its use by the steel industry and because there is a relative shortage of good quality coking coal. Thus, the roads which carry a high percentage of this type of coal are in the least vulnerable position in respect to losses from competing fuels. On the other hand, the market for steam coals is highly competitive, both within the industry and in competition with other fuels. The domestic market is also a competitive one. However, superior quality domestic coals have a competitive advantage over all other coals.

---

**HE'S STILL NUMBER 1**

# Seven Month Purchases Near $1½ Billion

***Equipment commitments exceed last year's for same period by 466.9 per cent***

Heavy buying of equipment by domestic railroads continued through July, shooting up the value of locomotive and car purchases during this year's first seven months to $544,509,000, compared with $96,054,000 of equipment orders during the comparable 1949 period, an increase of 466.9 per cent. July equipment purchases included 30,065 freight-train cars (costing an estimated $150,325,000), 87 Diesel-electric locomotive units and 15 steam locomotives (costing about $13,810,000), and four passenger-train cars (estimated to cost approximately $500,000).

Total purchases by railroads during the first seven months of the current year have climbed to $1,483,992,000, compared with $1,193,350,000 in the first seven months of the preceding year, an increase of $290,642,000. In all categories but equipment, however, railroad purchases during the seven-month period were below the comparable period last year.

1950 RAILWAY PURCHASES*

| | July (000) | Seven Month Totals 1950 (000) | Seven Month Totals 1949 (000) |
|---|---|---|---|
| Equipment** | $164,635 | $ 544,509 | $ 96,054 |
| Rail | 9,681 | 58,083 | 68,259 |
| Crossties | 4,044 | 33,267 | 53,013 |
| Other Material | 78,033 | 517,301 | 609,495 |
| Total from Manufacturers | $256,393 | $1,153,160 | $ 826,821 |
| Fuel | 44,168 | 330,832 | 366,529 |
| Grand Total | $300,561 | $1,483,992 | $1,193,350 |

*Subject to revision
**Amount placed on order

JULY* PURCHASES OF MANUFACTURED GOODS (Excl. Equip. & Fuel)

| Year | July '50 Compared to Other Julys (000) Amt. | % Change | Month | July '50 Compared to Other Months '50 (000) Amt. | % Change | Year | Seven Month Totals '50 And Other Years (000) Amt. | % Change |
|---|---|---|---|---|---|---|---|---|
| 1944 | $86,971 | + 6 | Jan. | $74,314 | + 23 | 1944 | $591,760 | + 3 |
| 1945 | 83,978 | + 9 | Feb. | 72,304 | + 27 | 1945 | 570,668 | + 6 |
| 1946 | 82,185 | + 12 | Mar. | 87,984 | + 4 | 1946 | 540,509 | + 13 |
| 1947 | 105,869 | — 13 | Apr. | 86,610 | + 6 | 1947 | 711,263 | — 14 |
| 1948 | 110,457 | — 17 | May | 98,966 | — 7 | 1948 | 760,456 | — 20 |
| 1949 | 91,906 | —— | June | 96,715 | — 5 | 1949 | 730,767 | — 17 |
| 1950 | 91,758 | | July | 91,758 | | 1950 | 608,651 | |

JULY* PURCHASES OF RAIL

| Year | July '50 Compared to Other Julys (000) Amt. | % Change | Month | July '50 Compared to Other Months '50 (000) Amt. | % Change | Year | Seven Month Totals '50 And Other Years (000) Amt. | % Change |
|---|---|---|---|---|---|---|---|---|
| 1944 | $5,597 | + 73 | Jan. | $8,806 | + 10 | 1944 | $44,855 | + 29 |
| 1945 | 6,989 | + 39 | Feb. | 6,444 | + 50 | 1945 | 42,648 | + 36 |
| 1946 | 5,670 | + 71 | Mar. | 7,669 | + 26 | 1946 | 29,866 | + 94 |
| 1947 | 8,024 | + 21 | Apr. | 7,796 | + 24 | 1947 | 49,683 | + 17 |
| 1948 | 7,143 | + 36 | May | 10,060 | — 4 | 1948 | 52,186 | + 11 |
| 1949 | 11,021 | — 12 | June | 7,627 | + 27 | 1949 | 68,259 | — 15 |
| 1950 | 9,681 | | July | 9,681 | | 1950 | 58,083 | |

*Subject to revision

JULY* PURCHASES OF CROSSTIES

| Year | July '50 Compared to Other Julys (000) Amt. | % Change | Month | July '50 Compared to Other Months '50 (000) Amt. | % Change | Year | Seven Month Totals '50 And Other Years (000) Amt. | % Change |
|---|---|---|---|---|---|---|---|---|
| 1944 | $7,475 | — 46 | Jan. | $3,823 | + 6 | 1944 | $50,159 | — 34 |
| 1945 | 5,778 | — 30 | Feb. | 3,985 | + 2 | 1945 | 40,647 | — 18 |
| 1946 | 7,851 | — 48 | Mar. | 4,984 | — 19 | 1946 | 50,428 | — 34 |
| 1947 | 8,535 | — 53 | Apr. | 5,286 | — 23 | 1947 | 57,092 | — 42 |
| 1948 | 7,621 | — 47 | May | 5,491 | — 26 | 1948 | 42,869 | — 22 |
| 1949 | 7,239 | — 44 | June | 5,654 | — 28 | 1949 | 53,013 | — 37 |
| 1950 | 4,044 | | July | 4,044 | | 1950 | 33,267 | |

*Subject to revision

## JULY* PURCHASES OF OTHER MATERIAL

| July '50 Compared to Other Julys (000) | | | July '50 Compared to Other Months '50 (000) | | | Seven Month Totals '50 And Other Years (000) | | |
|---|---|---|---|---|---|---|---|---|
| Year | Amt. | % Change | Month | Amt. | % Change | Year | Amt. | % Change |
| 1944 | $73,899 | + 6 | Jan. | $61,685 | + 27 | 1944 | $496,746 | + 4 |
| 1945 | 71,211 | + 10 | Feb. | 61,875 | + 26 | 1945 | 487,373 | + 6 |
| 1946 | 68,664 | + 14 | Mar. | 75,331 | + 4 | 1946 | 460,215 | + 12 |
| 1947 | 89,310 | — 13 | Apr. | 73,528 | + 6 | 1947 | 604,488 | — 14 |
| 1948 | 95,693 | — 18 | May | 83,415 | — 6 | 1948 | 665,401 | — 22 |
| 1949 | 73,646 | + 6 | June | 83,434 | — 6 | 1949 | 609,495 | — 15 |
| 1950 | 78,033 | | July | 78,033 | | 1950 | 517,301 | |

## JULY* PURCHASES OF FUEL

| July '50 Compared to Other Julys (000) | | | July '50 Compared to Other Months '50 (000) | | | Seven Month Totals '50 And Other Years (000) | | |
|---|---|---|---|---|---|---|---|---|
| Year | Amt. | % Change | Month | Amt. | % Change | Year | Amt. | % Change |
| 1944 | $47,384 | — 7 | Jan. | $46,700 | — 5 | 1944 | $353,443 | — 6 |
| 1945 | 47,049 | — 6 | Feb. | 34,823 | + 27 | 1945 | 329,216 | —— |
| 1946 | 50,270 | — 12 | Mar. | 56,725 | — 22 | 1946 | 305,349 | + 8 |
| 1947 | 49,404 | — 11 | Apr. | 51,288 | — 14 | 1947 | 379,260 | — 13 |
| 1948 | 68,011 | — 35 | May | 48,272 | — 9 | 1948 | 486,149 | — 32 |
| 1949 | 37,104 | + 19 | June | 48,856 | — 10 | 1949 | 366,529 | — 10 |
| 1950 | 44,168 | | July | 44,168 | | 1950 | 330,832 | |

## JULY* TOTAL PURCHASES (Excl. Equip.)

| July '50 Compared to Other Julys (000) | | | July '50 Compared to Other Months '50 (000) | | | Seven Month Totals '50 And Other Years (000) | | |
|---|---|---|---|---|---|---|---|---|
| Year | Amt. | % Change | Month | Amt. | % Change | Year | Amt. | % Change |
| 1944 | $134,355 | + 1 | Jan. | $121,014 | + 12 | 1944 | $945,203 | — 1 |
| 1945 | 131,027 | + 4 | Feb. | 107,127 | + 27 | 1945 | 899,884 | + 4 |
| 1946 | 132,455 | + 3 | Mar. | 144,709 | — 6 | 1946 | 845,858 | + 11 |
| 1947 | 155,273 | — 12 | Apr. | 137,898 | — 1 | 1947 | 1,090,523 | — 14 |
| 1948 | 178,468 | — 24 | May | 147,238 | — 8 | 1948 | 1,246,605 | — 25 |
| 1949 | 129,010 | + 5 | June | 145,571 | — 7 | 1949 | 1,097,296 | — 14 |
| 1950 | 135,926 | | July | 135,926 | | 1950 | 939,483 | |

---

## JULY* INVENTORIES OF RAIL

| July '50 Compared to Other Julys (000) | | | July '50 Compared to Other Months '50 (000) | | |
|---|---|---|---|---|---|
| Year | Amt. | % Change | Month | Amt. | % Change |
| July 1, 1944 | $22,729 | + 65 | Jan. 1 | $31,926 | + 18 |
| 1945 | 25,213 | + 49 | Feb. | 36,893 | + 2 |
| 1946 | 22,716 | + 65 | Mar. | 40,594 | — 8 |
| 1947 | 26,536 | + 41 | Apr. | 41,482 | — 9 |
| 1948 | 30,837 | + 22 | May | 38,941 | — 4 |
| 1949 | 36,486 | + 3 | June | 38,618 | — 3 |
| 1950 | 37,542 | | July | 37,542 | |

## JULY* INVENTORIES OF CROSSTIES

| July '50 Compared to Other Julys (000) | | | July '50 Compared to Other Months '50 (000) | | |
|---|---|---|---|---|---|
| Year | Amt. | % Change | Month | Amt. | % Change |
| July 1, 1944 | $75,244 | + 21 | Jan. 1 | $101,393 | — 10 |
| 1945 | 67,450 | + 35 | Feb. | 102,491 | — 11 |
| 1946 | 76,000 | + 19 | Mar. | 105,934 | — 14 |
| 1947 | 88,686 | + 2 | Apr. | 106,269 | — 15 |
| 1948 | 82,143 | + 11 | May | 99,118 | — 8 |
| 1949 | 96,167 | — 6 | June | 95,463 | — 5 |
| 1950 | 90,779 | | July | 90,779 | |

## JULY* INVENTORIES OF OTHER MATERIAL

| July '50 Compared to Other Julys (000) | | | July '50 Compared to Other Months '50 (000) | | |
|---|---|---|---|---|---|
| Year | Amt. | % Change | Month | Amt. | % Change |
| July 1, 1944 | $418,408 | + 24 | Jan. 1 | $528,400 | — 2 |
| 1945 | 450,773 | + 15 | Feb. | 526,201 | — 1 |
| 1946 | 456,505 | + 14 | Mar. | 525,771 | — 1 |
| 1947 | 553,228 | — 6 | Apr. | 521,506 | —— |
| 1948 | 610,025 | — 15 | May | 520,845 | —— |
| 1949 | 623,281 | — 17 | June | 518,654 | —— |
| 1950 | 520,334 | | July | 520,334 | |

## JULY* INVENTORIES OF SCRAP

| July '50 Compared to Other Julys (000) | | | July '50 Compared to Other Months '50 (000) | | |
|---|---|---|---|---|---|
| Year | Amt. | % Change | Month | Amt. | % Change |
| July 1, 1944 | $ 9,683 | + 35 | Jan. 1 | $14,874 | — 12 |
| 1945 | 9,494 | + 37 | Feb. | 14,840 | — 12 |
| 1946 | 11,036 | + 18 | Mar. | 12,922 | + 1 |
| 1947 | 9,239 | + 41 | Apr. | 14,147 | — 8 |
| 1948 | 14,210 | — 8 | May | 14,269 | — 9 |
| 1949 | 16,535 | — 21 | June | 14,304 | — 9 |
| 1950 | 13,045 | | July | 13,045 | |

## JULY* INVENTORIES OF FUEL

| July '50 Compared to Other Julys (000) | | | July '50 Compared to Other Months '50 (000) | | |
|---|---|---|---|---|---|
| Year | Amt. | % Change | Month | Amt. | % Change |
| July 1, 1944 | $62,558 | — 21 | Jan. 1 | $48,928 | —— |
| 1945 | 53,708 | — 9 | Feb. | 45,969 | + 7 |
| 1946 | 44,691 | + 10 | Mar. | 39,369 | + 25 |
| 1947 | 56,565 | — 13 | Apr. | 42,492 | + 16 |
| 1948 | 83,946 | — 41 | May | 43,695 | + 12 |
| 1949 | 81,567 | — 40 | June | 45,298 | + 8 |
| 1950 | 49,112 | | July | 49,112 | |

## JULY* TOTAL INVENTORIES†

| July '50 Compared to Other Julys (000) | | | July '50 Compared to Other Months '50 (000) | | |
|---|---|---|---|---|---|
| Year | Amt. | % Change | Month | Amt. | % Change |
| July 1, 1944 | $588,622 | + 21 | Jan. 1 | $725,521 | — 2 |
| 1945 | 606,638 | + 17 | Feb. | 726,394 | — 2 |
| 1946 | 610,948 | + 16 | Mar. | 724,590 | — 2 |
| 1947 | 734,254 | — 3 | Apr. | 725,896 | — 2 |
| 1948 | 821,161 | — 13 | May | 716,868 | — 1 |
| 1949 | 854,036 | — 17 | June | 712,337 | —— |
| 1950 | 710,812 | | July | 710,812 | |

*Subject to revision

†All total inventory figures taken from I.C.C. statement M-125 for the month indicated

# Radio Important Among Discussions Of Communications Officers

***Continuing progress in the development and maintenance of modern railway communication systems the theme of three-day annual meeting of A.A.R. Communications Section***

**Right — R. C. Thayer, Chairman, Communications Section, Superintendent Telegraph, Great Northern. Below left— J. R. Smith, Vice-Chairman, Communications Section, Assistant to Vice-President — Communications, Southern. Below right—A. H. Grothmann, Secretary, Communications Section**

With opening addresses by J. W. Barriger, president of the Chicago, Indianapolis & Louisville, and E. M. Webster, commissioner, Federal Communications Commission, the 27th annual meeting of the A.A.R. Communications Section was held at the French Lick Springs Hotel, French Lick, Ind., on October 17, 18 and 19. Presiding over the 1950 meeting were R. C. Thayer, chairman of the section and superintendent of telegraph of the Great Northern, J. R. Smith, vice-chairman, assistant to vice-president—communications of the Southern, and A. H. Grothmann, secretary of the section.

A new feature of the session this year was a series of short talks by nine representatives of railroad communication departments dealing with unusual installations and routines devised by their roads to overcome special communication problems. Special papers were presented by C. O. Ellis, superintendent of communications of the Chicago, Rock Island & Pacific, on microwave radio relay installations for railroads; and by F. J. Gorman, development engineer of the Ansonia Electrical Division of the Noma Electrical Corporation, on splicing plastic-type telephone cables. In addition, reports of nine standing committees and four subcommittees on 61 separate items covered all phases of railway communications from pole-line construction and maintenance to microwave radio relay systems. Twenty-six manufacturers and members of the Railway Telegraph and Telephone Appliance Association displayed new developments in the railway communications field.

### *Address by Commissioner Webster*

Explaining that he was not a railroad man and that it would be presumptuous for him to tell railway communications men how to run their business, Commissioner Webster said, "I appreciate, of course, that the conservative railroad industry, with very good reason, may at times resist any attempt at hasty action in making use of newly developed ideas. Too much depends upon reliability. No system as vast as the railroad systems of this country can adopt new techniques or new equipment on a national basis in any other than an orderly fashion. But no industry," he continued, "including the railroad industry, should be so hidebound and inflexible that it cannot recognize progress and the necessity for keeping abreast of the various transportation aids it does employ. This is particularly true with regard to the radio art."

Commissioner Webster said further that in recent months, "considerable interest has been evidenced by individual railroads and other groups in the use of microwave frequencies in the area above 300 megacycles, and one of the questions that has arisen concerns the promulgation of standards for their use. In its recent revision of the Rules Governing the Railroad Radio Service, the commission listed specific microwave frequency bands for use on an experimental or developmental basis.

"The availability of the microwave region of the spectrum opens up an entirely new field," he pointed out. "While certain techniques were developed during the war for the application of microwave frequencies to specific uses such as radar, very little was done towards the development of equipment or technique for the adoption of these frequencies to communication needs. After the war, research laboratories and manufacturers commenced an active experimental program directed to this end. As a result, a number of manufacturers recently have placed on the market new types of microwave equipment. The individual equipment, however, differs materially in such technical respects as circuit design, method of modulation and channel width. Hence, at the present time, there appears to be no single generally established and generally recognized system. The commission," Commissioner Webster said, "does not wish to promulgate any rules and regulations which might tend to freeze or to discourage development in this new field. It seems more desirable to permit operation of the various systems on a developmental basis, so that manufacturers may have a free hand in further experimentation, and so that industry can more

**Comparison of Radio Stations Authorized and Number of Inductive Carrier Installations on Railroads—May, 1949, and May, 1950**

| Type Station | Radio | | Inductive Carrier | |
|---|---|---|---|---|
| | May 1949 | May 1950 | May 1949 | May 1950 |
| Train—Base | 74 | 147 | 146 | 182 |
| Train—Mobile | 868 | 1,921 | 833 | 915 |
| Yard-Terminal—Base | 141 | 168 | 22 | 18 |
| Yard-Terminal—Mobile | 1,466 | 1,928 | 63 | 58 |

fully explore its needs and requirements." Commissioner Webster stated that more than one-half of the larger railroad systems now use radio in some phases of their operations. "While I do not wish to open old wounds," he continued, "I would like to mention that in my opinion the reduction in the number of frequencies from 60 to 39 which you suffered has not retarded your growth. You are to be congratulated on adjusting yourselves to the commission's decision of last year, which I assure you was an absolute necessity and in the public interest. In no way does this minimize the importance of railroad radio. I am sure that you realize that properly planned radio systems will pay dividends to all users."

### *Reports on Railroad Radio*

Committee No. 4—Radio and Allied Communication, reported that from May, 1949, to May, 1950, the number of railroads using radio and/or inductive carrier communication increased from 72 to 88, with totals of 329 base and 2,836 mobile stations in train service, and 186 base and 1,986 mobile stations in yard and terminal service. In the same period, the Rock Island was granted authorization for two operational fixed and four relay railroad developmental stations in Kansas, to be operated on four frequencies between 6,590 and 6,710 megacycles; and the New York, New Haven & Hartford was authorized to operate a railroad developmental station on 2,455 megacycles. A comparison of radio stations authorized by the F.C.C. and number of inductive carrier installations on the railroads is shown in the table. The report lists the individual railroads using these facilities, the types of installations and number of base and mobile stations in train and yard and terminal services.

The Radio and Allied Communications Committee, in addition, presented information on the Western Union Telegraph Company's radio relay systems between New York, Philadelphia, Washington and Pittsburgh, and reported that two railroad microwave radio relay installations had been commenced during the past year—one on the Rock Island between Norton, Kan., and Goodland, 106 miles, and the second on the Santa Fe between Galveston, Tex., and Beaumont, 70 air-line miles. The Rock Island project, which is to replace transmission of telephone and telegraph communications over line wires subject to severe damage annually in a bad storm area in Kansas, has been completed and is now undergoing the final tests. It was described in general in the October 7 *Railway Age*, and will be discussed more thoroughly in the November issue of *Railway Signaling and Communications*.

The reports of Committee No. 9—Economics, included information on the Pennsylvania's inductive train communication system, supplementing similar data presented in 1949. Two-channel FM inductive train telephones are now in service on 282 Pennsylvania steam locomotives, 297 Diesel-electric locomotives, 131 cabooses and 72 wayside stations, these stations being located on main lines between Baltimore, Md., Harrisburg, Pa., Pittsburgh and Fort Wayne, Ind., between Pittsburgh and Columbus, Ohio, and on two branch lines—the Belvidere-Delaware branch, Trenton, N. J., to Phillipsburg, and the Sandusky branch, Columbus, Ohio, to Sandusky, comprising in all over 1,600 miles of line.

The extension of the communication system to include over twice as much territory as reported in 1949, has been found, according to the 1950 reports, to produce commensurate increase in benefits. The enlarged installations have increased use to about 825 calls per day, resulting in approximately 400 instances daily in which train movement has been improved, and saving of about 80 train hours a day.

The committee also submitted information on the New York Central's experience with long-span communications pole-line construction between Suspension Bridge, N. Y., and Oswego, involving an 11.4 mile test section. Class-6, 25-ft. creosoted pine poles were used to give extra clearance because of the longer-than-usual wire spans, and spaced 20 to the mile, with crossarms and four new No. 8 Copperweld high-strength 40 per cent conductivity wires. The old Western Union wire was abandoned and removed after cancellation of the contract.

Crediting salvage of the old copper wire, the construction cost of the new section of long-span line, according to the report, amounted to $1,250 per mile. Subsequently, however, as a result of development work in connection with high-frequency carrier systems, the railroad installed such a system in lieu of the block circuit, which obviated the necessity of renewing that circuit. Estimates for standard or conventional construction, using Class-7, 20-ft. creosoted pine poles, spaced 40 to the mile, with two brackets for the existing copper wires, indicated the cost of construction would be appreciably lower. The remaining portion of the line was thus built on this basis at an actual cost of $904 per mile. Based on actual cost figures, the New York Central estimated that, had the conventional construction been completed by replacing the iron block wires with No. 9 copper conductors on four-pin crossarms, as was done in the long-span construction, the cost would have amounted to $1,121 per mile, as compared with $1,250 per mile for long-span construction.

### *Nine Short Talks*

The presentation by railway men on unusual communication installations and routines developed by their lines to conquer special problems covered: (1) air-generator units for radio power supply on cabooses, by H. T. Sagert, radio communications engineer of the Rock Island; (2) development and use of vibrator converters on rolling stock, L. R. Thomas, electronics engineer, Santa Fe; (3) Teletype and I.B.M. machine combinations, C. J. Colombo, transmission and foreign wire relations engineer, Canadian Pacific; (4) remote control switching of communication circuits, W. W. Pulham, superintendent of communications of the Denver & Rio Grande Western; (5) the Infomat system for train and Pullman-space reservations, A. M. Crawford, superintendent telegraph and signals, Pennsylvania; (6) Western Electric Type E-1 telephone repeaters, J. H. Wallis, communications engineer, Baltimore & Ohio; (7) speech-plus-duplex telegraph operation on carrier circuits, C. O. Jett, communications engineer, Union Pacific; (8) radar-type line-fault finders, J. W. Brannin, electronic engineer, Southern Pacific; and (9) half-carrier operation on physical circuits, by G. M. Brown, electronic engineer of the New York Central.

A more detailed report of the proceedings, technical talks, papers, and various committee reports will appear in the November *Railway Signaling and Communications*.

Some New York Central passenger facilities observed by members of the Associated Traffic Clubs during their October 16 sightseeing trip around New York Harbor

# Associated Traffic Clubs Hold 27th Annual Meeting

Preservation of free enterprise was the theme of the annual meeting of the Associated Traffic Clubs of America at New York's Commodore Hotel, October 16, 17 and 18. President J. P. Krumech, general traffic manager, American Car & Foundry Co., sounded the keynote in the opening moments of the first business session on Tuesday morning, October 17. The accent during the rest of that day was carried on as most of the speakers, including British students of transport, dwelt on this subject. (Monday had been devoted to registration and a New York Central-conducted sightseeing trip around New York Harbor, aboard some of the railroad's ferry boats.)

Dr. E. A. Nightingale, associate professor of transportation at the University of Minnesota, spoke at the October 17 morning session of the A.T.C. There is, he said, too much "heat" and not enough "light" in connection with discussion of free enterprise in the field of transportation. "Free enterprise in American transportation, as we understand it," he remarked, "involves private ownership and operation of the various modes of transportation under effective regulation of carriers for hire. It also includes freedom of choice by the user, where different modes of transportation are available, and among carriers within a particular mode where more than one carrier is available." He recommended that traffic men and all supporters of free enterprise study such recent reports as that of the Hoover Commission, that of Secretary of Commerce Sawyer, and the recent report of the Brookings Institute on the subject, and proceeded to outline some of the conclusions reached in those papers.

### *The "Residual Agency" in Transportation*

Dr. Nightingale developed a theory of what he called the "residual agency and the residual carrier." "The residual agency," he said, "is the form of transportation which is able to give a complete common carrier transportation service of such importance in the nation's economy that it is in the *sine qua non* category. The residual agency, however, competes with other agencies on the basis of service and price, secures whatever traffic is not moved by the other agencies or by private transportation operations over publicly provided facilities used by other agencies. Within the particular agency of transportation we find the residual carrier, especially in the agencies in which the facilities for conducting transportation for hire, or otherwise, are publicly provided. Here the residual carriers are definitely common carriers offering a complete service within the limitations of the particular type of transportation and of their certificates of convenience and necessity."

In transportation, he said, the residual agency is the railroads, which "would appear to be indispensable."

He raised the question whether if shippers expect the best service from the residual carrier, "have they not some obligation to it?" He also suggested that in some ways the highway common carrier may be closer to the railroads than to the contract or private carriers. He ventured the opinion that they may eventually, in fact, find themselves in the difficult competitive position the railroads find themselves in today.

On subsidies, Dr. Nightingale said that the "postwar circumstances will have to be analyzed at the earliest possible opportunity. The task should be undertaken by a temporary agency or research committee established by Congress for that purpose and answerable only to Congress. Carriers . . . would thus avoid the charge of self-interest."

The speaker said, in answer to a question from the floor, that in order to "sell" the idea of free enterprise, we must not rely on logic alone. Rather we must couple the need for it to the want of something, perhaps the desire for economic gain on the part of the individual.

**The New York Central-conducted trip, aboard some of that road's ferry boats, took A.T.C. members past these Lehigh Valley, Erie and Delaware, Lackawanna & Western piers**

**Pennsylvania piers 27, 28 and 29 on the New York side of the Hudson river**

John S. Burchmore, of the Chicago law firm of Walter, Burchmore & Belnap, chairman of the A.T.C.'s public affairs committee, and counsel for the National Industrial Traffic League, who addressed the annual dinner of the A.T.C. on October 17, said in a press conference on October 16 that the nation's railroads are endangered by a group at Washington which wants to nationalize transportation. Seizure of the railroads could come about as a result of a service breakdown by the railroads, he said, but he added that he is confident such a breakdown will not occur. The important things to remember, he emphasized, are, first, that there are forces in the United States which will make every effort to socialize transportation and, further, that constant awareness of this will enable the industry better to concentrate its efforts to avert nationalization, which ultimately would lead to the total destruction of the nation's free institutions.

The report of the committee on membership, the chairman of which is D. S. Mackie, freight traffic manager of the New York Central system at Chicago, was presented at the October 17 morning session. It revealed that club memberships in the A.T.C. has risen to 164 and the number of individuals belonging to the organization has climbed to nearly 50,000.

G. Lloyd Wilson, professor of transportation and public utilities at the Wharton School of the University of Pennsylvania, reported, in his capacity as chairman of the A.T.C.'s education and research committee, that the committee had nominated the following individuals to receive awards for outstanding educational work in the field of traffic: L. E. Gallaspie, general traffic manager of Reynolds Metals Company, Richmond, Va.; J. H. Tedrow, transportation commissioner, Chamber of Commerce, Kansas City, Mo.; and Roy T. Blanchard, traffic manager of the Public Service Company of Colorado, Denver.

C. R. Zarfoss, vice-president, traffic, of the Western Maryland, addressed the October 17 afternoon session. He told the delegates that the courage and determination of our pioneer forebears must be revived and used to stave off the socialization of transportation in the United States. There is, he said, a "distinct drift to government ownership of railroads in this country," which could be brought to rapid fruition by a "drying up of the sources of private investment capital." He cited as one among many disturbing symptoms an increase in investment portfolios of insurance companies of the securities of industrial concerns and public utilities while, concurrently, the amount of railroad securities remained at approximately the level it had reached many years ago.

"I love trucks," Mr. Zarfoss said. "They served as an economic alarm clock for the railroads. They woke up the railroad industry and put it on its toes." Brought sharply to an awareness of the dangers facing it, as it has been, the railroad industry can escape nationalization, he concluded, if it dedicates itself to the preservation of free enterprise in America. While nationalization seems at the moment to threaten only the railroads it must be remembered that actually free enterprise in all fields of endeavor is threatened and, hence, railroads must be in the vanguard of the fight to preserve the system which has made this nation great.

What was described as an interim report on nationalization of transport in the British Isles was presented to the meeting by Christine R. Taylor, chairman of the Women's Traffic Club of Britain, and James A. Dunnage, vice-president of the Institute of Traffic Administration. It was an "underlying argument" of the nationalizers

in Great Britain, the report said, "that integration of all the transport services, rather than competition between them, was needed so that the public of Britain, and the staffs engaged in transport, could receive a better deal and major sources of waste could be cut out. Thus, until the British Transport Commission has begun the process of integration, and its results are apparent, no final verdict is possible. And they have not yet seriously begun on it. Indeed, Lord Hurcomb [chairman of the B.T.C.] has publicly said that his own approach is to make each branch of transport thoroughly efficient in its own right before attempting integration. Remorseless critics find this merely a delaying tactic, but sober assessors will not agree.

"Railway engineers, now moving toward fewer and standardized types of locomotives, could by voluntary agreement have gone further than they did before the war, while four groups of railroads remained. The same is true of coach and goods truck standardization. The work of improving station access and buildings, modernizing the refreshment and other public amenities, opening up and reorganizing the ticket offices, etc., which has already made some impact on the public mind, could equally have proceeded under private enterprise. Yet the fact remains that for reasons inherent in human nature, none of those things had got far.

"Fighters for nationalized transport . . . made a strong point of the better staff relations that should follow, and it is here we particularly look. Have they followed? The trade unions themselves are not yet very satisfied, either as to wage levels or as to the share of participation in management that comes to them."

### *Current British Opinion*

Continuing, the report said, "Let us turn to those who were the most severe critics of the nationalization proposals while they were in the making and see what they now say. Going to the fountainhead, politically and idealogically, the Conservative party issued a new policy document ready for the recent general elections. They have little to say on transport and that little was not very clear. They showed no desire to return the railroads to private enterprise nor to change in any way the status of the transport stock that replaced the original railway shares.

"Their sole railway proposal . . . differs so little from the present setup and its own expressed intention that the point must have been meaningless to the electors. Their policy statement continued with a promise to halt nationalization of road transport and to hand back to private enterprise those concerns already acquired. They carefully did not say 'to their original owners' and here they are probably realistic, for it is doubtful whether, by the time such a repurchase may become legally possible, many of those small original owners will have either the loose cash or the desire to re-enter business. . . . Only a few strong financial groups could, it seems, come up as purchasers from the state of its road haulage interests, so that government supporters are not slow to point out the class motives, even the antisocial motives, that inspire that particular idea.

"There is some evidence that, however the virtues of fighting for business had previously been extolled," the report went on, "there is relief in feeling that personal salary depends less directly upon day-to-day traffic gained and that measures of reorganization for greater efficiency can be taken when they are physically possible. Maybe the presence of numbers of young and middle-aged men with service experience has helped the national system here, since the change from secrecy in a small firm to a system of records and reporting such as must exist in any large organization is being accomplished with less friction and heartburning than would otherwise have been so. And it is true that many of the 'big boys' in road haulage, once they saw how the cat was jumping in 1946-47, were quite quick in secret negotiations with the Ministry with a view to handing over voluntarily to the new Executive and being ready for senior office within it . . . . As we see it, the head-on conflict between the political principle of nationalization and of the private enterprise school of thought—never as simple as that, anyhow—is now passing out, at least in British transport."

Mr. Dunnage remarked, after Mrs. Taylor had read their jointly prepared paper, that, as he saw it, there was a twofold reason for nationalization of railroads in England: First, but by no means of predominant importance, were the demands of, among others, railroad labor unions which for about 40 years had been calling for nationalization, and, secondly, the fact that railroads in Britain were not doing well and, as he saw it, took no effective action to see that they did do well. He observed further that nationalization in England has not meant "jobs for the boys." This he termed an ineffective propaganda device used all too often by proponents of free enterprise in transportation. Actually, Mr. Dunnage continued, railroad unions in Britain now occasionally complain bitterly that too many good positions in the railroad industry are held by erstwhile opponents of nationalization. He strongly recommended to all who are interested in retaining private ownership and control of American transportation, particularly railroads, that they concentrate their efforts on maintaining equipment at a level of modern, high efficiency. Assiduous attention to providing the public—passengers and shippers—with the best available equipment and service will be vastly more effective in staving off government ownership, he said, than will concentration upon the menace of competing forms of transportation, subsidized or otherwise.

### *Publication Awards*

The A.T.C.'s committee on club publications, through its chairman, Francis C. Tighe, traffic manager of Union Carbide & Carbon Corp., New York, presented awards to five member clubs for the excellence of periodicals published by them. The clubs, and the names of their papers, were: Traffic Club of New York (The Bulletin); Traffic Club of Chicago (The Way Bill); Women's Traffic and Transportation Club, Baltimore, Md. (Traffic Tips); Transportation Club of San Francisco (Time Card); and the Women's Traffic Club of Philadelphia (The Traffic Dame).

R. A. Ellison, manager, transportation department, Cincinnati, Ohio, Chamber of Commerce, and secretary treasurer of the A.T.C., reported that attendance at the meeting had included 431 delegates and 473 visitors. All officers were reelected, as follows: Chairman, J. M. Fitzgerald, vice-chairman, Eastern Railroad Presidents' Conference, New York; president, Mr. Krumech; executive vice-president, Fred E. Luebbe, general traffic manager of the Kroger Company, Cincinnati; secretary-treasurer, Mr. Ellison; and vice-president, education and research, Dr. Wilson.

Presiding at the banquet on October 17 was James W. Harley, director of traffic of United States Rubber Company and president of the Traffic Club of New York. Mr. Fitzgerald was toastmaster.

"In selecting the topic 'private enterprise is not free,'" Mr. Burchmore said in his address on that occasion, "I intend two lines of thinking:

"First, that private enterprise, whether in transportation or other branch of commerce or endeavor, is not free today in the sense of being untrammeled, but in vastly increasing measure it has become restrained by innumerable agencies of government and statutory and regulatory limitations.

"For this disturbing and unsatisfactory situation we are prone to criticize the alphabetical agencies, the executive departments, the Congress, the courts and the President, and to express general dissatisfaction with our government, under the delusion that government is an entity distinguished from we, the people, who are in truth the government in this Republic. The larger measure of blame rests upon ourselves in these matters.

"Second, that private enterprise is not free, in the sense that it is without cost, no price paid, but in truth exacts and deserves a high price in terms of individual contribution, effort and personal performance.

### *A Citizenry "Beguiled"*

"Those who think on these problems all too keenly," Mr. Burchmore continued, "realize today what a long, long way we have come on the pathway from free choice and personal responsibility in commerce, that is, in our business and personal affairs, from the days of free choice and complete individual responsibility in the direction of supposedly helpful management by a beneficent government. In the old days there was the sharp separation between the executive, the legislative and the judicial departments and functions of government; and the states were recognized as the supreme governments of sovereign powers, while the federal government was one limited to stated and delegated functions. America has not deliberately marched down this path towards the goal of a setting sun which precedes darkness and gloom, rather than a rising sun, of dawn of better things. We have been beguiled by a slow encroachment and confused by one law piled upon another, one decision beyond another, one new regulation after another . . . .

"All of us have been more or less concerned with railroad and other common carrier rate regulation; and I have watched the Interstate Commerce Commission through the years successfully performing its difficult job. There has been so much to admire, commend and welcome in the work of that commission, and so little ground for criticism, distinguished, of course, from differences of opinion concerning the soundness of particular actions. But there are present weaknesses in the I.C.C. regulations and truly dangerous trends in its administration, making a tremendous threat to private enterprise in transportation. Enlarged powers are enjoyed, exercised, or sought beyond the limit of human ability.

"It seems that in pending cases the commission is undertaking to enlarge the laws made by Congress, to impose bureau controls in cases where evils may exist, but the remedy is worse than the disease. In the general class rate investigation it seems set on riding rough-shod over the views and judgment of railroad managements to impose a uniform national rate scale which I am criticizing only from the standpoint that the proposals themselves represent an effort to override and a threat to shackle private enterprise in transportation.

"Instead of finding fault with our fellow Americans who work for the government—we must not think of them as constituting the government, for they are really only the employees and servants of the people in this union of states—we ought to accept the blame as resting upon ourselves.

"On the whole, all of us—whether in the managements of the railroads, of the motor carriers, or the air lines, or representatives of the shippers, and especially men in the legal profession—we all run to Washington on every occasion to get help, to book orders, to find favors, to use government processes to our own betterment. So we profess to despise the bureaucrat, but we embrace him and applaud his work when he is on our side! And, in the long run, when it comes to the rules of the game, we are all prone and our best organizations are given to devising new controls, suggesting greater restrictions, against others, instead of seeking to relax the bonds that now operate against ourselves.

"For concrete illustration, I happened to examine carefully the other day a proposal under consideration by a special legislative committee of American Trucking Associations. They say, in substance, that the I.C.C. is 'railroad minded' and they are displeased with the results of the administration of the Motor Carrier act, which they think has not been favorable enough to organized motor carriers. At any rate this A.T.A. proposition, not put up yet for public consideration, nor finally accepted in A.T.A. circles, involves abolishing the Interstate Commerce Commission.

"At one time or another, upon receipt of individual decisions, pretty nearly everybody wants to abolish that commission—temporarily—so that is not so bad! But as a substitute, the proposal is to establish a Federal Transportation Commission, sitting at Washington with nine life members at $17,500 a year apiece, with a research staff and all that, and in addition, eight regional commissions of three or more life members each, with headquarters in such points as Chicago, Atlanta, Dallas, San Francisco, salaries $15,000 per annum, research staffs, etc., and in addition an undersecretary of commerce of transportation, in the executive department, to serve as administrator and coordinator, with a large staff and with rule-making authority. Who knows what that means in plain English, but who doubts that the administrator will think he has power to run some features of transportation? And I am not aware of any study of the transportation problem these days that has resulted in a serious proposal to relax regulations or lessen the powers of the administrators . . . .

"Had there been a break-down or failure of transportation anywhere along the line the past forty years, in war emergencies or peacetime," Mr. Burchmore concluded, "you may be quite sure the occasion would have been seized upon for government ownership and government operation of railroads, and this very likely would have been the forerunner of further socialism of industry, as in England. But to the men and women in traffic and transportation is due the credit for making the function and agencies of transportation almost completely successful through the years, this with the cooperation of the shippers. There is a growing appreciation in the higher ranks of business management and in the public mind, of the dignity and importance of the traffic man and his work. It extends to the quality of the job they have been doing. This tribute needs no amplifying by an enumeration of your accomplishments, my friends in traffic work! Your failures and shortcomings are written in the sands at low tide, so far as I am concerned."

The October 18 business session of the American Society of Traffic and Transportation, affiliated with the A.T.C., heard addresses by Herschel A. Hollopeter, transportation director of the Indiana State Chamber of Commerce and chairman of A.T.C.'s finance committee, on the aims and progress of the society, and by Dr. Wilson, director of education for the A. S. of T. & T., on the society's program of examinations which serves as the basis for certifying qualifications for membership in the society.

# GENERAL NEWS

## Knudson Program Calls for 227,400 New Freight Cars by June 30, 1952

**Administrator of D.T.A. also sees new car-performance record and stepped-up repair program required on basis of N.S.R.B. estimate that 1952 ton-miles will be 15 per cent above 1947 total**

National defense requirements call for building "a minimum of 227,400 new freight cars" by June 30, 1952, according to a presentation in support of his proposed steel-allocation program which Defense Transport Administrator James K. Knudson submitted last week to the National Production Authority. Citing National Security Resources Board estimates that railroad ton-miles in 1952 will total 753 billion, 15 per cent above the post-war peak in 1947, Mr. Knudson said the handling of such a load will require, not only the new cars which he recommends, but also a new car-performance record and stepped-up repair programs to bring the bad-order ratio down to 3 per cent.

The latter, like the new-car program, will require "adequate materials and manpower," the D.T.A. administrator emphasized. The new car-performance record which he has in mind is 385,000 ton-miles per serviceable car per year. The best previous performance on this basis was 382,693 ton-miles in the war-time peak year of 1944. Mr. Knudson expressed doubt that the 385,000 figure can actually be attained—"unless war places the entire economy on a 6-to-7 day operating week."

The Knudson program was presented to N.P.A., which is headed by William H. Harrison, at an October 12 meeting which that agency and D.T.A. held with representatives of the railroads and freight car builders. The meeting was attended by executives of the principal car builders and railroad purchasing officers. D.T.A. was represented by P. A. Hollar, vice-president of the American Car & Foundry Co., who has been serving as consultant to Administrator Knudson.

### "Interim Assistance" Considered

"Steel requirements for the building of at least 10,000 new freight cars a month as well as for the maintenance and repair of existing cars" were discussed at the meeting, according to a joint N.P.A.-D.T.A. statement. The statement added that "further discussions will be held with the steel industry . . . before final determinations are made." Meanwhile, N.P.A. will take up with the steel industry the problem of steel supply for "immediate needs" of the new-car and repair programs. Such discussions will consider "what interim assistance can be provided before the proposed program gets under way."

In transmitting his presentation to Administrator Harrison, of N.P.A., Mr. Knudson had expressed his approval of the proposed program calling for 10,000 new cars monthly, but he warned that it will "barely suffice" to meet national defense needs under the most favorable conditions. And he indicated that it might be necessary later to propose increasing the monthly output to some higher figure.

His program calling for the building of 227,400 new cars by June 30, 1952, would have the effect of increasing the car ownership of Class I roads by 75,600 cars, to a total of 1,795,000, Mr. Knudson explained. In addition to the 75,600 increase in Class I ownership, the program assumes that 120,000 new cars will be required to replace overage cars which must be scrapped by Class I roads prior to June 30, 1952; and that 31,800 cars will be needed for expansion and replacements in car fleets maintained by private car lines and "other non-Class-I owners."

To attain the Association of American Railroads goal of bringing Class I ownership to 1,850,000 cars would require continuance of the building program into 1953, Mr. Knudson also said. This A.A.R. program will require construction of about 267,000 new cars. William T. Faricy, president of the association, said in a recent address. However, Mr. Knudson told N.P.A. that 323,412 new cars would be required "to replace all retirements and to increase the size of the Class I fleet to 1,850,000 cars" by June 30, 1953. It is understood that the different figures are the result of different estimates as to the rate of retirements.

Mr. Knudson made public the "summary and conclusions" of his presentation to N.P.A. There he referred to freight-car shortages of recent months and went on to warn that "we can neither defend ourselves adequately nor carry the war to foreign aggressors unless the railroads—the backbone of military transportation—can be equipped to carry a substantially heavier load than they are failing to absorb right now."

As to the "prospective traffic burden," Mr. Knudson gave N.S.R.B.'s estimate of 753 billion ton-miles for 1952, as noted above. He went on to say this increase of 15 per cent above the 1947 ton-miles would not mean an equivalent increase of 15 per cent in carloadings or in the tonnage of freight carried, explaining that:

"Much of the ton-mile increase will be

**CANADIAN NATIONAL board of directors in a recent session at company headquarters in Montreal, Que. Left to right are: W. J. Parker, Winnipeg, Man.; R. B. Brenan, St. John, N. B.; Wilfrid Gagnon, Montreal; Donald Gordon, chairman; H. J. Symington, Montreal; J. A. Northey, Toronto, Ont.; and B. L. Daly, Montreal. This is the first photograph of the board since Mr. Gordon became president and chairman last January**

absorbed in the longer average haul which occurs under wartime conditions. The average haul per ton of freight increased from a pre-World War II level of approximately 370 mi. to a wartime peak of 494.3 mi. in 1944. By 1947, the base year for N.S.R.B.'s estimate, it had receded to 425.8 mi. The estimated average haul for 1950, largely because of the Korean situation, has increased to 440 mi.

"If we are to be prepared to fight a two-front war by 1952, we must anticipate an average haul in the neighborhood of 500 mi. in that year. At the ton-mile level assumed above, this would permit acceptance of only 1,506 million tons of freight—only 1 per cent more than in 1944, and 2 per cent less than in 1947. If, instead of war, we have sustained mobilization into 1952, it is estimated that the average haul will not increase beyond 465 mi. per ton. This would permit acceptance of 1,619 million tons—5.3 per cent more than in 1947."

In view of "accomplished and proposed expansion in basic industries uch as steel, our planning cannot assume less than the modest tonnage increases indicated above," the D.T.A. administrator suggested. He added that "a strong possibility that N.S.R.B. estimates may be revised upward as the situation develops must be kept in mind."

As to serviceable cars required, the Knudson presentation put the 1952 "minimum" at 1,956,000. This was called "highly conservative," because it assumes that the new utilization record of 385,000 ton-miles per serviceable car per year can be attained. Eighty-nine per cent, or 1,741,000 cars, of the serviceable fleet would come from Class I roads; the remaining 11 per cent, or 215,000 cars, from other roads and private car lines.

### Bad-Order Goal 3 Per Cent

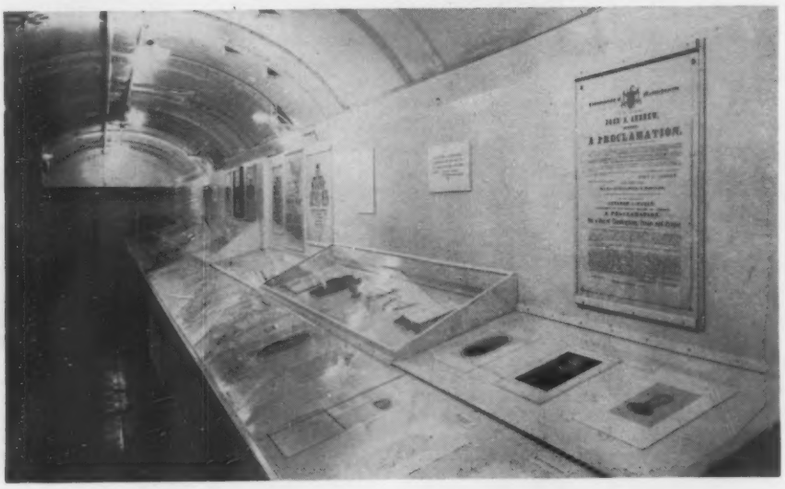
He was again assuming "optimistically" when he calculated that Class I roads could maintain a serviceable fleet of 1,741,000 cars with a total ownership of only 1,795,000 cars, Mr. Knudson said. To do so will require the proposed reduction of the bad-order ratio to 3 per cent. As to the prospects for that, the D.T.A. administrator had this to say:

"The A.A.R. has established 5 per cent as a reasonable objective, and already has succeeded in reducing the 8 per cent level of last February to 6.3 per cent on September 1. With adequate materials and men, however, the 3 per cent level can eventually be reached, at least temporarily, during any war crisis, as it was during two years—1943 and 1944—of World War II. However, it cannot be sustained indefinitely at such a level."

Reviewing the situation as to orders for new cars, Mr. Knudson reported that Class I roads had 94,000 on order as of October 1, when an additional 12,000 were on order for "non-Class-I owners." The D.T.A. administrator also reported that "assurance has been given that the Class I roads will order the remainder just as promptly as is necessary to keep the backlog of orders at a satisfactory level."

Assuming an even rate of output, Mr. Knudson calculated that his program calls for the production of 10,335 cars monthly. He added, however, that "in view of the lag of getting started, provision should be made for producing above the established 10,000 level in those months when additional material can be made available."

**NOW ON TOUR throughout Illinois, this specially fitted Illinois Central baggage car houses a display of items from the world's greatest collection of Abraham Lincoln mementoes. With approval of Governor Stevenson, an organization has been established to purchase the entire Oliver R. Barrett Lincoln collection for the people of Illinois and arrange for it to be permanently displayed in the state historical library. The I.C. not only supplied and outfitted the above car to help the campaign, but is also handling it during the entire tour which covers 27 Illinois cities**




## Rail, Truck Revenue Per Ton-Mile Compared

### It's 4 to 1 in favor of motor carriers, I.C.C. bureau shows

Average revenues per ton-mile of Class I motor carriers have remained about four times as great as those of Class I railroads during the past eight years, according to the latest issue of the "Monthly Comment," publication of the Interstate Commerce Commission's Bureau of Transport Economics and Statistics. The bureau made this finding in an article comparing average ton-mile revenues for the 1942-49 period. Other articles in the issue included one on holdings of railroad securities, another on the age of freight cars, and two in which the bureau analyzed recent waybill studies.

The comparison of rail and motor carrier ton-mile revenues showed that the average ton-mile revenue of Class I roads was 9.32 mills in 1942; and that it rose gradually to 1.34 cents in 1949. Meanwhile, the weighted average ton-mile revenue of common and contract truckers rose from 3.74 cents in 1942 to 5.345 cents in 1949. The ratio of rail ton-mile revenue to that of motor carriers ranged from 22.5 per cent in 1947 to 25.1 per cent in 1949, the 1942 ratio having been 24.9 per cent.

The bureau also presented index figures, with 1942 as the base year of 100, to show the "pronounced upward trend" in both rail and motor ton-mile revenues that has occurred, particularly since 1945. In that year the motor carrier index was 108.3, as compared

to 1942, and by 1949 this index figure had risen to 142.9. Meanwhile, the railroad index, which stood at 103 in 1945, was up to 143.8 in 1949.

Discussing the reasons behind these increases, the bureau said they should not be considered as entirely reflecting changes in rates. Shifts in consist of traffic and length of haul also may have important effects, the bureau said. It then added, in this connection, that while little information is available on the consist of motor-carried traffic, "it obviously is composed largely of relatively high rated traffic." As to length of haul, the bureau said motor common carriers had average hauls of 202 mi. in 1942, which increased to a 216-mi. average in 1948; motor contract carriers averaged 112 mi. in 1942 as compared to 123 mi. in 1948. Meanwhile, the average haul per railway had declined from 228 mi. in 1942 to 224 mi. in 1948.

### Funded Debt Slightly Higher

The article devoted to holdings of railroad securities showed that par value of unmatured railway funded debt held by the public at the close of 1949 was $8,691 million, an increase of 1.6 per cent above December 31, 1948. The 1949 figure includes equipment obligations which, the I.C.C. bureau said, increased about $252 million in 1949 over 1948.

Largely because of reorganizations and "considerable" debt retirements by many roads, unmatured railway funded debt held by the public in 1949 was 26.8 per cent below that held in 1930. Capital stock held by the public has changed only slightly since 1935, the bureau said. In 1949 stock holdings of the public were $268 million below those in 1930.

As to securities held by railroads, the bureau said rail holdings of funded debt amounted to $2,206 million at the end of 1949, a drop of 6.9 per cent below the $2,369 million held at the close of 1930. Capital stock held by railroads on December 31, 1949, was 14.3 per cent below 1940, and included a decrease of $32 million in such holdings below 1948. The bureau said that with the exception of 1949 there has been a "consistent downward trend" in the amount of railway-owned debt since 1935.

### Age of Freight Cars

Turning to its discussion of the age of freight cars, the bureau presented figures to show that since January 1, 1940, the proportion of cars one to five years old increased from 9.34 to 17.37 per cent. Basing its calculations on data published by the American Railway Car Institute, the bureau said that during the same 10-year interval the proportion of freight cars over 25 years of age increased from 24.47 to 35.2 per cent. On January 1, 1950, it added, 52.94 per cent of the total ownership of freight cars were 21 years old and over.

Since the beginning of 1940 there has been a net total increase of 116,749 in the number of freight cars, the bureau said. It went on to say that of the 616,875 cars in the over-25-year age group as of January 1, 53 per cent were over 30 years old.

**AN IDLER CAR is used by the Delaware, Lackawanna & Western for working freight cars on and off its floats at Hoboken, N. J.**

### Analysis of Car Use

An analysis of the use of different types of freight cars, based on one of the bureau's recent waybill studies, was the basis for another article. This analysis showed that for all carload traffic terminated in 1949, 39 per cent of the cars moved were box cars, 28.4 per cent were hoppers, 13.8 per cent gondolas, 6.6 per cent tank cars, 5.4 per cent refrigerator, and 6.8 per cent flat, stock and special cars.

The bureau presented tables in connection with this article, one of which showed the percentage distribution of cars by commodity groups. According to this table, the manufactures and miscellaneous commodity group accounts for 55.2 per cent of the box cars used, while products of agriculture require 25.8 per cent. Products of mines take 96.8 per cent of the hopper cars. Gondolas are largely used by both products of mines and the manufactures group, with the former accounting for 45.5 per cent of such cars and the latter 42.8 per cent.

Another table included in this article showed that 74.7 per cent of all products of agriculture move by box car, as does 58.5 per cent of the manufacturers and miscellaneous commodity group and 54.3 per cent of the products of forests. Forwarder traffic moves 96.3 per cent by box car.

The other waybill study was Statement No. 5034, entitled "Distribution of Freight Traffic and Revenue Averages, by Commodity Classes and Rate Territories." Using data from this statement, the bureau compared the average short-line haul per ton and the short-line revenue per ton-mile on all traffic terminated in 1949 with similar data for 1947.

This comparison showed that for all commodities combined, the average haul per ton declined 1.7 per cent, from 343 mi. to 337 mi., during the period. Short-line revenues per ton-mile went up 26 per cent during this period, however, from 1.27 cents to 1.6 cents. Average revenues per ton-mile in 1949 showed increases over 1947 ranging from 17.8 per cent for products of forests to 28.6 per cent for manufacturers and miscellaneous.

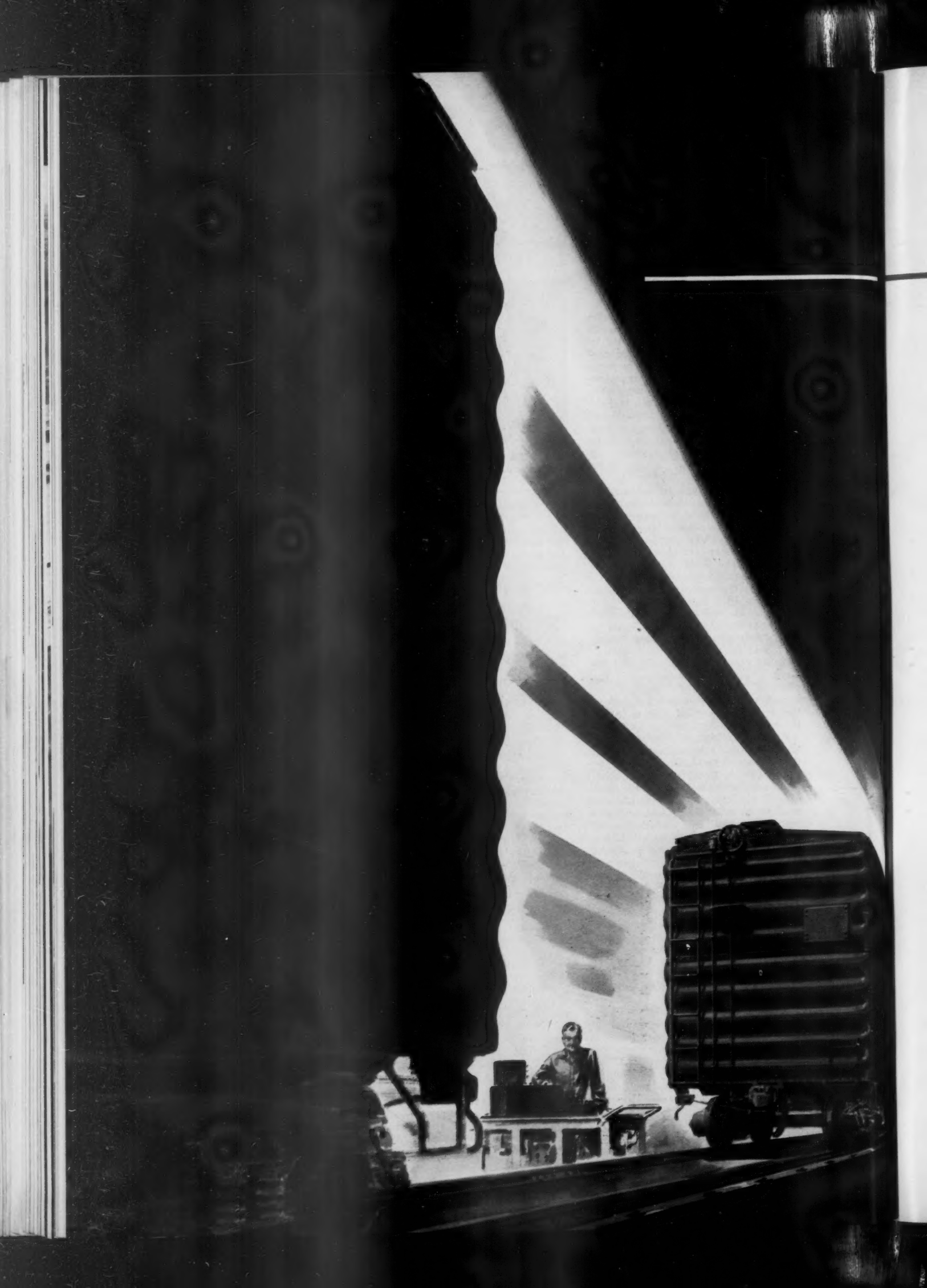
There was also included in the Comment an article on motor carriers of property, comparing returns for the first half of 1950 with the first half of 1949. It was shown that Class I intercity motor carriers of property had an increase of 21.2 per cent in freight tonnage in 1950 over 1949. The bureau, in noting this increase, compared it with a decrease of 4.7 per cent in the number of tons of revenue freight carried by Class I roads between the same periods.

## Shipping Container Makers Predict Some Shortages

During the week of October 9-13, the Society of Industrial Packaging & Materials Handling Engineers held its annual meeting at Philadelphia, Pa. In conjunction with this meeting were an exhibition of packaging and materials handling machinery, containers, cushioning materials, steel strapping, etc., and a short course on materials handling and packaging under the auspices of Temple University's Community College.

Emphasis on packaging for the military service was strong, the object being to see that supplies arrive at point of use in shape for use. This damage prevention angle, and the preview of what is coming in the line of shipping containers, were the most interesting features to railroadmen in attendance.

*(Continued on page 40)*



# Crack-up!

## ...TO GET FACTS, NOT THEORIES, ABOUT FREIGHT-CAR STAMINA

Slam box cars together, measure the results of the impact, and you've got a line on the cars' ability to "take it" in actual service. That's the reason for the drastic Pullman-Standard "hump" test.

Take *ends*, for example. Solidly loaded Car A (with "X" end) rolls down a ramp and crashes into similarly loaded Car B (with PS-1 end). To even things up, Car B then rolls (at the same speed), and Car A receives. Test follows test, at varying controlled speeds—and valuable, hard-to-get information is obtained.

That is how technical fact-finding is continually applied by Pullman-Standard, to make the PS-1 end—and the PS-1 *car*—the best we know how to produce.

## Pullman-Standard

**CAR MANUFACTURING COMPANY**

CHICAGO • NEW YORK • CLEVELAND • WASHINGTON, D. C.
PITTSBURGH • BIRMINGHAM • SAN FRANCISCO

## THE PS-1 BOX CAR

**Laboratory Tested . . . Road Proved . . . Field Inspected**

In building the PS-1, *standardization* never holds back *progress*. Dozens of improvements have been adopted since the introduction of this car in 1947.

Also, more than 21,000 PS-1 cars are being road-proved in actual service. And *field inspection* follows these cars, to see how they are doing—with a view to making future PS-1's even better.

At the same time, and all the time, *continuous assembly-line production* is doing its part—to make these sturdy, dependable, modern box cars readily and economically available. The PS-1 is a *quality* box car, *efficiently* produced for America's value-demanding railroads.

**PALLET BOXES such as this are becoming more common in transportation. This box, designed for transporting curved and flat glass, won first prize in group 4 (for cleated panel boxes) of the protective packaging contest. Many layers of corrugated board inside give good protection to the glass**

*(Continued from page 37)*

for the materials handling course applied mainly to manufacturing industries, and materials handling equipment was displayed by only two major manufacturers — Clark Equipment Company and Yale & Towne Manufacturing Co.

Since much of the emphasis was on packaging for the military, export packaging and handling came in for considerable discussion. T. J. McLernon, manager of New York Harbor lighterage and stations for the Lehigh Valley, told his listeners that in 1949 the eight railroads serving New York spent $327,000 for cooperage on export and import freight, and that one of the prime reasons for this bill was poor lumber in large cases weighing from 2 to 40 tons. Inside the case, the L. V. man stated, there is too little securing of machinery to its skids, thus allowing the machinery to shift, damaging the case and, frequently, the machine itself. Also, Mr. McLernon went on, large exporters, who do a good packaging job themselves, let subcontracts to firms not nearly as careful. Cartons (especially glassware) not sealed, second-hand bags and bags torn on nails in cars were given as other causes of much of the cooperage bill.

Of interest to traffic men and loss and damage prevention men were the sessions in which shipping containers were discussed by representatives of manufacturers of different types of containers. Included in these sessions were predictions of shortages, suggestions that containers be reused, and a review of the newest developments in the protective packaging field.

C. E. Taylor, general manager, Eastern division, of the Gaylord Container Corporation, said there has been a marked increase in use of telescopic solid fiber boxes for iced meats and poultry, and that use of these containers for carload lots is being encouraged and is expected to grow. More and more, too, Mr. Taylor said, the hardware industry can be expected to use such containers. Bottlers and brewers likewise are expected to use more solid fiber boxes, although brewers especially have been using such cartons for 15 years.

Use of more multi-wall paper bags in shipping and storing of food products also is expected, said K. A. Arnold of the St. Regis Paper Company. Such bags, outer surfaces of which have been treated with Pyrenone, Mr. Arnold said, are impenetrable to insects.

During the past year, said Glen Mather, secretary of the Fiber Drum Manufacturers Association, a new fiber drum was put on the market by Greif Bros. Cooperage Company which cuts down the shipping weight of such containers, which has been approved by the U. S. Department of Agriculture for 200 lb. of nonfat dry milk solids, and has been used for dry chemicals, detergents, etc. This drum has fiber sidewalls, metal bottom and plywood top. Dehydrated vegetables and fruits are being shipped in similar drums, Mr. Mather said. Considerable savings in freight costs result from using these containers instead of 5-gal. square tin cans placed in fiber boxes.

**T. J. McLERNON, superintendent of New York Harbor lighterage and stations for the Lehigh Valley, was one of the speakers at the 5th annual exposition of the S.I.P.M.H.E.**

Another successful recent development, Mr. Mather went on, is that of a fiber drum for transportation of liquids. This container has successfully transported liquids weighing up to 400 lb., and special 6-month permits have been granted for its use in shipping liquids by the Classification Committee. Mr. Mather said this drum has "outperformed the standard wooden barrels" used previously by the company which developed the containers, Rohm & Haas Co., Bristol, Pa.

L. F. McKay, vice-president of the Ohio Corrugating Company, Warren, Ohio, said the steel shipping container situation was "tight," with drums and pails especially being in great demand. "The net result can only be an extremely tight situation in supply of steel shipping containers and [it] suggests to users that every means available to them should be exercised in conserving their available supply by making reuse of them to the greatest extent possible and otherwise using care and caution in filling, handling and shipping to insure as long life as possible." Mr. McKay also said considerable thought is being given to development of a new 55-gal. drum which can be loaded five abreast across a freight car, "all of which would permit more efficient loading, heavier loads and safer transportation."

H. M. Lapidus, supervisor, preservation and packaging division, Naval Aviation Supply Office, Philadelphia, told a large audience that much of the damage due to poor packaging came about as a result of faulty application of inner cushioning material. Too often, Mr. Lapidus said, failures of packaging to do the job are because the shipper has failed to regard each part of the object being shipped as a problem in itself. This, he went on, is because the maximum safe shock an article can withstand successfully is

## *Car Surpluses and Shortages*

**Average daily freight car surpluses and shortages for the week ending October 14 were announced by the Association of American Railroads on October 19 as follows:**

| | Surplus | Shortage |
|---|---|---|
| Plain Box | 0 | 19,837 |
| Auto Box | 9 | 294 |
| Total Box | 9 | 20,131 |
| Gondola | 22 | 6,143 |
| Hopper | 63 | 8,222 |
| Covered Hopper | 0 | 143 |
| Stock | 50 | 387 |
| Flat | 34 | 557 |
| Refrigerator | 1,780 | 15 |
| Other | 228 | 171 |
| | 2,186 | 35,769 |

dependent on the shock resistance of the most delicate component of that article. Therefore, intelligent application of cushioning materials cannot be made until areas of strength and weakness of the product being packaged are known. "As an example, there is a tendency in the aviation industry to mount or support certain items in a manner simulating installation on a plane. This approach, which takes advantage of the inherent strength in the product has proven most successful." Cushioning materials, he concluded, should never be called on to do a job which can be done by the product itself.

Chief railroad attendance at the meeting was from the purchases and stores, stations, and loss and damage prevention departments of eastern carriers.

## Postmaster General Seeks Parcel Post Rate Increase

Complying with a directive of Congress, Postmaster General Donaldson has asked the Interstate Commerce Commission to consent to establishment of increased rates on fourth-class mail; i.e., parcel post. Estimates submitted to the commission by Mr. Donaldson indicated that his proposal would yield more than $110 million a year, bringing total annual revenues from fourth-class mail above $510 million; but he said it would leave the rates "lower in most instances than those provided by any other transportation agency rendering comparable service."

On October 18, the commission issued an order instituting an investigation of the proposal and setting it for hearing November 14 at Washington, D. C., before Commissioner Mitchell and Examiner Rice. The proceeding is docketed as No. 30690, Increased Parcel-Post Rates, 1950.

The directive from Congress was contained in an appropriation act of September 27. It stipulated that none of the funds appropriated for the Post Office Department could be withdrawn from the Treasury until the postmaster general had certified that he had requested the consent of the I.C.C. "to the establishment of such rate increases . . . as may be necessary to insure the receipt of revenue from fourth-class mail service sufficient to pay the cost of such service." (See *Railway Age* of September 30, page 48.)

Mr. Donaldson's presentation to the I.C.C. was in the form of an October 13 letter to Commission Chairman Johnson. It was submitted pursuant to a 1925 law which authorizes the postmaster general to revise rates on fourth-class matter — "subject to the consent of the Interstate Commerce Commission after investigation." The presentation included figures indicating that the 1949 deficit from fourth-class mail was approximately $105 million. Thus the proposed increases are calculated to put the service in the black by about $5 million a year.

They would establish a scale of regular fourth-class rates ranging from 15 cents for the first pound on local shipments to 27 cents for shipments to the eighth zone. For each additional pound, rates would range from 1.25 cents, local, to 14 cents, eighth zone. Present rates for the first pound range from 10 cents, local, to 18 cents, eighth zone; the rates for additional weight from the 2nd to the 10th pound, inclusive, range from 1 cent to 11.5 cents, and from the 11th to the 70th pound, inclusive, from 0.75 cent to 11.25 cents.

### Would Establish Surcharges

Mr. Donaldson also seeks authority to establish surcharges of not exceeding 50 cents per parcel on parcels weighing over 50 lb., and not exceeding 25 cents per parcel for those weighing not more than 50 lb. but which must be handled and transported outside mail bags. These would be in addition to the regular zone rates. The cost of handling such parcels, he said, "is greater than the cost of handling other parcels and taxes the available postal facilities and equipment."

On fourth-class mail consisting of catalogs and similar printed advertising matter, Mr. Donaldson would establish a scale of first-lb. rates ranging from 10 cents, local, to 18 cents, eighth zone; and of rates ranging from 1.5 cents to 11 cents for each additional pound. The present range of first-lb. rates on this matter is from 7.5 cents to 15 cents, while the rates for each additional pound range from 1 cent to 6 cents.

On books (except those sent by authorized libraries to readers and returned by such readers), the present rates are 8 cents for the first pound and 4 cents for each additional pound — regardless of the zone of delivery and with a weight limit of 70 lb. Mr. Donaldson proposes to increase this to 10 cents for the first pound and 5 cents for each additional pound; and to fix the weight limit at 10 lb. He would apply the regular zone rates to parcels of books exceeding 10 lb. He would also provide that zone rates would apply on any shipment of books where the postage at such rates would be less than at the rates of 10 cents for the first pound and 5 cents for each additional pound.

### No Change for Libraries

No change is proposed in the present rate for library books, which is 4 cents for the first pound and 1 cent for each additional pound, when mailed for delivery within the first three zones or the state in which mailed. It was "in view of the long-established policy of Congress to accord a special rate to such books" that he decided to leave this scale unchanged, Mr. Donaldson said.

The postmaster general expressed his belief that the proposed rates would be sufficient to pay the cost of fourth-class mail service, as contemplated by the 1925 act, and that they "meet the condition placed upon the department" by the appropriation bill. If the I.C.C. consents, Mr. Donaldson proposes to make the new rates effective "on the first day of the second quarter beginning after the date of such approval." He advised the commission that it was "important and highly desirable" that his request be given "prompt consideration"—in view of the "urgent need for additional revenue."

## Arbitrator Named in Canadian Wage Dispute

(Special to Railway Age)

Justice R. L. Kellock, of the Supreme Court of Canada, has been named by the Canadian federal government as special arbitrator in the long-standing wage-hour dispute between the principal Canadian railways and approximately 124,000 of their non-operating employees. His appointment is in line with provisions of emergency legislation passed on August 30 by a special session of the Canadian Parliament to end a nine-day Dominion-wide strike of employees involved in the dispute. (See *Railway Age* of September 2, page 77.)

The employees, represented by 17 different unions, had originally demanded a 40-hr. work week in place of the present 48-hr. week, with no loss of pay; wage increases of 7 cents per hour for one group of employees and 10 cents for another; and a check-off system for union dues. The check-off demand, and also that for a 10-cent hourly wage increase for some of the employees, have apparently been dropped but the unions appear to be standing firm on the 7-cent hourly pay increase proposal, and also on their insistence on a 40-hr. week beginning no later than June 1, 1951. The special strike-ending legislation provided for an interim pay increase of 4 cents per hour, while the railways have accepted the principle of the 40-hr. week to begin October 1, 1951.

### Decision to Be Final

Thus, the major issues which Justice Kellock will be called upon to decide are: (1) The exact amount of the hourly pay increase, with the 4 cents set by Parliament as a minimum and the 7 cents demanded by the unions as a maximum; and (2) the effective date of a 40-hr. week. The companies and the unions have continued negotiations on those points since the end of the strike, and their failure to agree led to appointment of an arbitrator. His decision on all outstanding issues will be final and binding on both parties under the provisions of the parliamentary act.

A previous arbitrator, Vice-Principal William Mackintosh of Queen's University, Kingston, Ont., was unable to bring the roads and the unions into agreement before the strike took place, but he did not possess Justice Kellock's power to decide the issues.

*(Continued on page 44)*

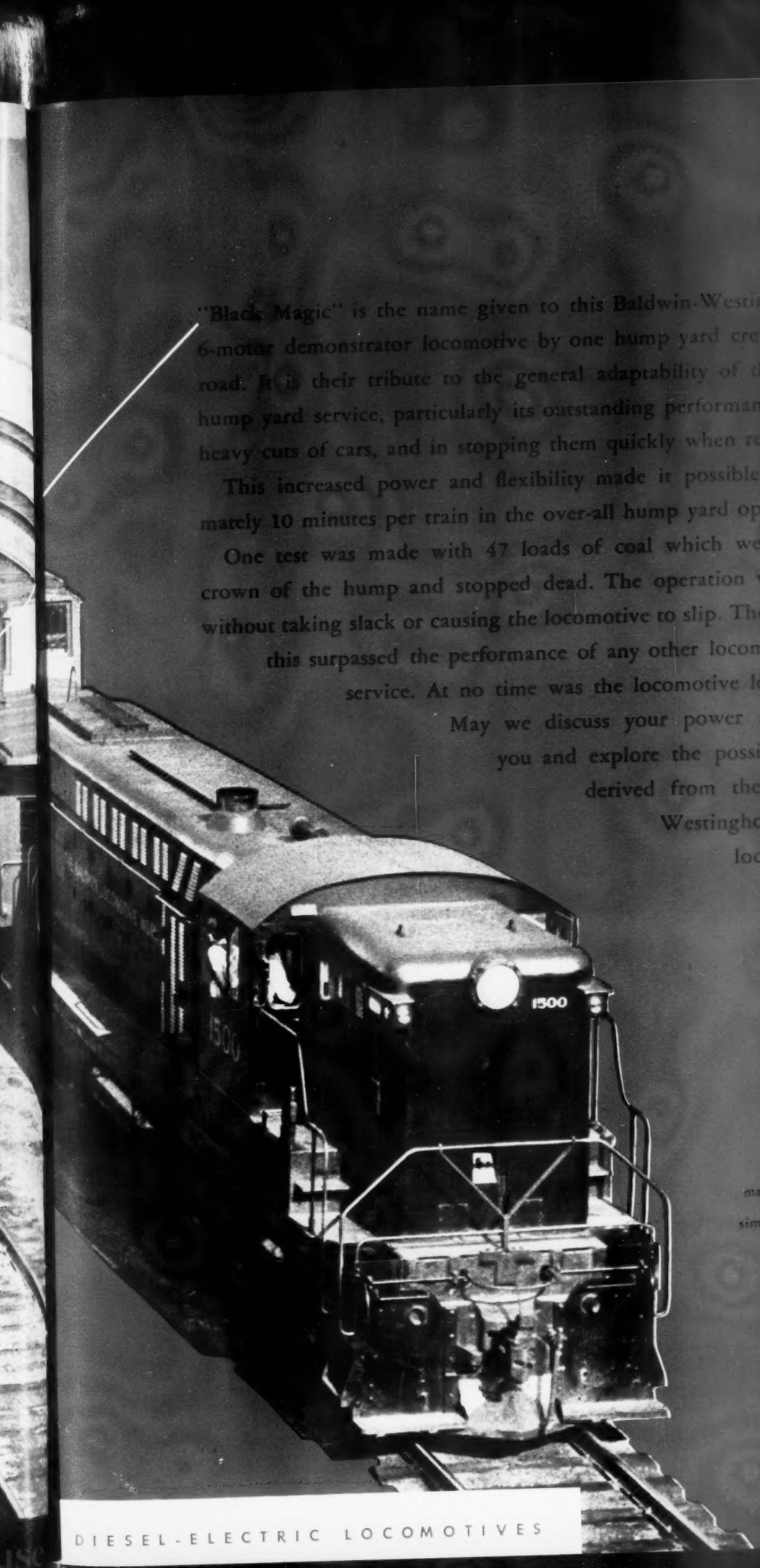
the
yard crew
named it
"black
magic"
THE BALDWIN
WESTINGHOUSE
BALDWIN - Westinghouse

"Black Magic" is the name given to this Baldwin-Westinghouse 1500-hp., 6-motor demonstrator locomotive by one hump yard crew on a large railroad. It is their tribute to the general adaptability of this locomotive to hump yard service, particularly its outstanding performance in accelerating heavy cuts of cars, and in stopping them quickly when required.

This increased power and flexibility made it possible to save approximately 10 minutes per train in the over-all hump yard operation.

One test was made with 47 loads of coal which were shoved to the crown of the hump and stopped dead. The operation was then resumed without taking slack or causing the locomotive to slip. The report states that this surpassed the performance of any other locomotive used in this service. At no time was the locomotive loaded to capacity.

May we discuss your power requirements with you and explore the possible benefits to be derived from the use of Baldwin-Westinghouse diesel-electric locomotives?




This locomotive is equipped with Baldwin Humping Control which makes it possible to utilize full tractive effort at all speeds. This control is simple, inexpensive, and easy to operate. One eastern railroad states that it is "one of the best devices ever applied to a diesel-electric locomotive".

DIESEL-ELECTRIC LOCOMOTIVES

*(Continued from page 41)*

Opinion in Ottawa appears to be that, whatever the outcome, the spiraling of rail wages and freight rates is likely to remain unchecked.

Any further increase above the 4-cent raise voted by Parliament will considerably boost railway operating costs, and present indications are that to meet that boost the railways will apply this fall for another freight-rate increase.

Because the federal government is said to be strongly opposed to any system of subsidies for the railways, and as it is also opposed to reimposition of price and wage controls, it now looks as if shippers and passengers will have to pay the higher costs.

The federal government is not alone in opposing subsidies. There is no organized demand for them outside the province of Saskatchewan, where there is a Socialist government. Manitoba and Alberta have made it plain they are against railway subsidies, and taxpayers in Ontario and Quebec also are against them. The railways have declared they do not favor subsidies, and that adequate freight rates are the only answer to the need for more revenue.

The tangled question of how to protect the financial structures of the railways will be dealt with in the report of the Royal Commission, which document is likely to be in the government's hands before the end of this year. But it has been hinted in government circles that the general transportation problem is so big and so complicated that the cabinet will want many months to digest the report and decide on legislative steps, if these prove necessary.

## Accelerated Amortization Must Get Symington O.K.

President Truman has designated the chairman of the National Security Resources Board, W. Stuart Symington, as the "certifying authority" under the accelerated-amortization provisions of the recently enacted tax act. Those provisions permit amortization of new facilities over a period of 60 months—provided they have been certified as necessary to national defense under certifying arrangements set up by the President.

In carrying out his functions as certifying authority, the N.S.R.B. chairman "shall utilize departments and agencies of the government according to their respective assigned responsibilities pursuant to the Defense Production Act of 1950," the President's order said. It went on to stipulate that such utilization would be as follows: "(a) To furnish reports and recommendations in respect of applications for necessity certificates . . .; (b) to maintain relationships with various industries in respect of applications for necessity certificates; (c) to develop necessary programs for the expansion of capacity."

Thus railroad applications for necessity certificates will be processed through Administrator James K. Knudson of the Defense Transport Administration. Certifications by its chairman will depend upon recommendation of the processing agency, an N.S.R.B. statement said.

## I.C.C. Grants More Time To Install AB Brakes

Division 3 of the Interstate Commerce Commission has given the railroads more time to complete installation of AB brakes on freight cars used in interchange service. An October 10 order in the No. 13528 proceeding amended the previously effective order insofar as it required railroads to install AB brakes on stated proportions of their unequipped cars, or withdraw such cars from interchange service, by next December 31.

The amended order abandons the proportional arrangement, but leaves December 31, 1951, as the deadline for completion of all installations or withdrawal of unequipped cars from interchange service.

## Wage Talks Continue

Representatives of the railroads and the two engine-service brotherhoods continued this week their Washington, D. C., meetings with respect to the wage and rules demands served by those unions sometime ago. The demands are those of the Brotherhood of Locomotive Firemen & Enginemen for a 40-hr. week with no loss in take-home pay for its members in yard service, and some rules changes applicable to its members in road service; and those of the Brotherhood of Locomotive Engineers for a 20 per cent increase in basic wage rates for its members in yard service, and allowances to its members in road service for expenses at away-from-home terminals.

As reported in the *Railway Age* of October 14, page 37, the B. of L.F.&E. has announced a plan to add to its now-pending demand a new proposal for a 35 cents per hour wage increase. The latter, however, has not been formally served on the carriers, and is not yet involved in the Washington discussions. Also announced last week was the plan of 15 non-operating unions to serve on October 25 demands for an increase of 25 cents per hour.

From Miami, Fla., where the Brotherhood of Railroad Trainmen is holding a convention, have come reports of that union's decision to institute a new wage drive. The B.R.T. is already involved with the Order of Railway Conductors in the yardmen's 40-hr.-week case which brought from those two unions the August 28 strike threat that caused President Truman to seize the railroads for operation by the secretary of the Army. That case remains in stalemate.

Meanwhile, the railroads and the Railroad Yardmasters of America have not yet signed contracts embodying terms of the agreement which was entered to settle that union's 40-hr.-case on the basis of the so-called Steelman formula. The latter is the proposal, framed by Dr. John R. Steelman, assistant to President Truman, which was rejected by the B.R.T. and O.R.C., but which settled the 40-hr. case involving yardmen represented by the Switchmen's Union of North America. (See *Railway Age* of October 7, page 75.)

## September Gross Was 21.2% Above Last Year

From preliminary reports of 81 Class I railroads, representing 79.7 per cent of total operating revenues, the Association of American Railroads has estimated that the September gross amounted to $671,933,827, an increase of 21.2 per cent above the $554,196,799 reported for the same 1949 month. Estimated September freight revenue was $562,668,955, as compared with September, 1949's $451,828,042, an increase of 24.5 per cent. Estimated passenger revenue was $58,251,523, as compared with $57,787,841, an increase of 0.8 per cent. All other revenue was up 14.4 per cent—to an estimated $51,013,349, as compared with $44,580,916.

## I.C.C. Assignment Change

The Interstate Commerce Commission has transferred administrative supervision of its Bureau of Informal Cases from Commissioner Knudson to Chairman Johnson. Supervision of the Bureau of Service was recently transferred from Chairman Johnson to Mr. Knudson, a move which made the latter the defense transport administrator.

## Eastern Roads File Reply To I.C.C. in 28310 Case

The Interstate Commerce Commission this week received a verified statement from Class I roads in Eastern territory in which the eastern roads said they could not meet the commission's October 15 deadline for filing "evidence-in-chief" in the Consolidated Freight Classification case, No. 28310.

The railroad statement said the time allowed was "wholly inadequate," and that denial of more time to consider and revise the "tentative ratings" contained in the so-called Greenly exhibit could bring about "a serious threat to the revenues of these respondents."

As noted in *Railway Age* of September 2, page 75, the Greenly exhibit was filed by A. H. Greenly, chairman of the Official Classification Committee, as an exhibit in a related case, No. 28300. Both eastern and western roads sponsored the exhibit which was referred to as "tentative ratings under consideration"; but the I.C.C. subsequently assigned the exhibit the status of a "tentative uniform classification" in the 28310 case and asked interested parties to submit "evidence-in-

For extra protection
of your
"extra-fare" freight
RUSH
SCULLIN L-V TRUCKS
the
smoothest
traffic-builder
between
LCL
and
your
rails!
SCULLIN L-V TRUCK
STEEL CASTINGS MANUFACTURER
SCULLIN STEEL CO.
SAINT LOUIS 10, MISSOURI
NEW YORK • CHICAGO • CLEVELAND • BALTIMORE • RICHMOND, VA. • MEXICO CITY, D. F.

chief" in the form of verified statements by October 15.

Discussing this action by the commission, the eastern roads in their statement this week said the Greenly exhibit is incomplete and subject to revision and expansion with further study. They said they can support the classification ratings "only if their proposed basis for class rates in 28300 is adopted and then only on the condition that the ratings shall be subject to the revisions and additions by respondents as contemplated by the reservations attached to the Greenly exhibit."

The roads went on to say that the combination of a uniform classification and a uniform basis of class rates for application thereto must fully preserve and protect carrier revenues. They said they feel that the commission is "obligated to observe such procedure as will produce that result."

They also referred to their petition of October 2, in which the roads asked the commission for more time in which to study and revise the Greenly exhibit. This petition was denied by the commission on October 5. (See *Railway Age* of October 14, page 38). In their present statement the roads said they feel "adequate consideration" was not accorded their petition, and they went on to say that procedural steps being taken by the I.C.C. in this proceeding "may be prejudicial . . . and contrary to law." The roads said they must have available a class rate scale before concluding their uniform classification. They added that they could not support the Greenly exhibit because of the absence of knowledge of the class rate scale.

## New "Railway Accounting Rules" Being Distributed

The latest edition of "Railway Accounting Rules," which is published by the Accounting Division, Association of American Railroads, is now being distributed, according to an announcement by Division Secretary E. R. Ford. The edition, known as the December 1, 1950, edition, will supersede on that date the presently effective September 1, 1949, edition.

Mr. Ford's announcement said "substantial" changes make it "essential" that copies of the new edition be placed "in the hands of all officers and employees engaged in interline accounting work." The announcement stated further that, pursuant to the usual practice, one copy will be furnished without charge to each accounting officer who is a member of the division.

Additional copies may be obtained by member roads and their employees for 75 cents each when ordered in quantities of 10 or more, and for $1 each when ordered in quantities of less than 10. Prices to non-member roads and others are double the foregoing. Orders should be placed with Mr. Ford, Transportation building, Washington 6, D. C., with remittances made payable to the A.A.R.

## News Briefs . . .

**. . . The first of nine new steel spans on the Illinois Central bridge over the Ohio river at Cairo, Ill., was scheduled to be moved into position on October 16. The span, 518 ft. long, 70 ft. high, and weighing 1,760 tons, replaces a span of similar length, 60 ft. high, and weighing about 1,100 tons. Renewal of steel work in the main channel spans of the bridge, at a cost of $6.5 million, was begun in June, 1949, and is scheduled for completion by the end of 1951. New spans, which will be placed on existing piers, are being erected by the American Bridge Company. It was estimated that replacement of the first span would interrupt rail traffic over the bridge for less than 48 hr., during which trains were to be detoured over alternate routes.**

**. . . All old-style, open-section sleeping cars assigned to regular runs on the Chesapeake & Ohio have now been replaced with new, streamlined, all-room cars, the railroad has announced. Elimination of open sections follows delivery of the last of 132 new cars, including coaches, lounges and sleepers, built by the Pullman-Standard Car Manufacturing Company as part of a modernization program begun by the C. & O. in 1946.**

**. . . February 10, 1951, will mark the 100th anniversary of the founding of the Illinois Central. "To accord suitable recognition to the completion of a century of service," the road is developing plans "to commemorate this centennial anniversary in every conceivable way" throughout the coming year.**

**. . . A "flatcar highway" has been established by the National of Mexico to fill a gap in the Pan-American Highway, which is otherwise passable as far south as Guatemala City, Guatemala. Ramps have been constructed to permit motorists to drive their automobiles onto railroad flat cars, which are then coupled onto daily passenger trains. The 255-km. train trip (approximately 160 mi.) costs $34.68 for the car and its owner, plus $2.71 for each additional passenger, according to tourists' reports. The passengers ride in regular accommodations on the train, not in their automobiles.**

## Central Vermont Celebrates Centennial at St. Albans

(Special to Railway Age)

Citizens of St. Albans, Vt., looked back 100 years in their history on October 18, when Donald Gordon, chairman and president of the Canadian National, paid tribute to John Smith and his associates of St. Albans, who, a century ago, founded what is today the Central Vermont Railway System. Mr. Gordon was speaking at a centennial luncheon as part of a civic holiday held to commemorate the 100th anniversary of the first train to arrive in St. Albans, now C.V. headquarters.

Mr. Gordon said the early railway founders were men with dreams, and that these dreams grew to fulfillment because they were conceived in the healthy climate of a nation that subscribed to the free political doctrines of democracy.

"Call this progressive thinking, action and accomplishment what you will, it has made your country and mine the envy of the world," Mr. Gordon said. "Men and women of our generation who have inherited the great fruits of these accomplishments must not fail ways to cherish and to defend this way of life that gives us not only the right to dream but the opportunity to make our dreams come true."

"While far from being a large railway, the Central Vermont need have no inferiority complex because of its size, for it holds a proud place in the development of community and state," Mr. Gordon added. "Few railways have reached so deeply into the life of the communities they serve and few have touched the personal lives of so many families down through the years."

Mr. Gordon explained that the C.V. is today what it was planned to be, a route for through traffic from the Atlantic seaboard and its industrial and manufacturing centers to the markets of the west.

To this has been added in its more recent history its affiliation with the C.N., making it an important element in the largest railway system in North America.

The centennial luncheon, sponsored by the St. Albans Chamber of Commerce, was attended by some 250 persons. Head table guests included Vermont's secretary of state, Howard E. Armstrong; Mayor Ben W. Fisher of St. Albans; Mayor Camillien Houde of Montreal, Que.; the pro-tem mayor of St. Johns, Que.; the mayors of Montpelier, Vt., Burlington and Barre, and of Willimantic, Conn.; vice-presidents S. F. Dingle, Alistair Fraser and T. H. Cooper of the C.N.; directors and officials of the C.V., and representatives of a number of eastern United States railroads.

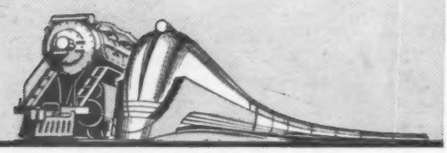
Just 100 years ago, at the exact hour that Mayor Fisher christened a Mountain-type steam locomotive the "City of St. Albans," the first passenger train ever to enter that railroad city arrived from Montpelier, with a distinguished passenger list, including state officials and legislators.

The christening of the "City of St. Albans," (the first C.V. locomotive to carry a name in 60 years), heretofore known as "601," climaxed the day's festivities.

## Plan for Short-Routing Empty Cars—Correction

Foreign cars made empty on roads which are not direct connections of the car owners, are the freight cars involved in the tentative short-routing *(Continued on page 51)*

# "Shop and Track Talk"

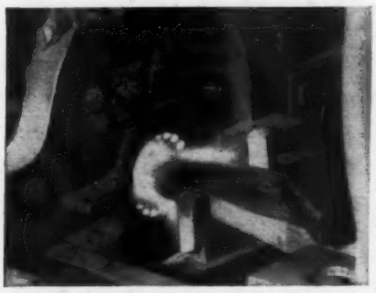


PUBLISHED BY THE OXWELD RAILROAD SERVICE COMPANY

## Tons of Ballast Laid Low with Low Cost Tamping Bars

Even after months of steady pounding, ballast tamping bars made from inexpensive materials by oxy-acetylene pressure-welding, show little signs of wear. The rugged, long-wearing bars —given an economical flame-hardening treatment which helps them resist wear—are made at low cost by a western railroad.

Two parts make up the bar, a handle and a blade—this saves forging and machining costs. The first step is to upset a collar on the bar. This is done in the pressure-welding machine. Then



*This pressure-welding machine was built by a railroad to make ballast tamping bars and other tools from inexpensive materials.*

the two parts are pressure-welded. An OXWELD ring burner heats the joint, pressure is applied, and in about three minutes the weld is made.

About 125 of these high-quality bars are turned out each day. Several other track tools are made by the same method . . . and all the tools get a flame - hardened case which means longer life.

If you'd like to make these bars, or other track tools in your shop, write to OXWELD. We'll be glad to show you how easily you can use pressure-welding and flame-hardening to save money.

*Finished ballast tamping bar. Upset collar and the weld between blade and handle were made in pressure-welding machine.*

## What's News?

► A railroad shop replaced broken tipple gears used on coal cars by flame-cutting new ones from steel plates — 606 inches of fast, accurate cutting saved demurrage on hundreds of cars.

► Excellent results have been obtained from the use of HELIARC welding on stainless steel under stress — welds are clean, smooth, and strong.

► An efficient UNIONMELT flexible welder is used on a production-line setup in one shop. Parts are arranged in a 21 ft. diam. circle around the machine. The welding operator merely goes from one part to another to make the required welds.

► Railroads are adding another money-saving operation to their track-laying program — flame-cleaning the ends of the rail. By removing mill scale from rail ends, the joints do not freeze — require much less maintenance.

THE OXWELD RAILROAD SERVICE COMPANY
Unit of Union Carbide and Carbon Corporation
Carbide and Carbon Building UCC Chicago and New York

## Longer Life for Frogs and Crossings

Simple, oxy-acetylene flame-hardening setups lengthen the life of open-hearth frogs and crossings. Frogs treated by this process give far longer service than unhardened frogs — more than five times longer service. The cost of the operation is so small—a No. 10-100 lb. frog can be hardened for less than $7.00, including the cost of handling—that large reductions in railroad maintenance expense are possible.

Ask OXWELD for Booklet F-7007 which describes this economical hardening process.

## Quick Henry, the Hooks

*When a shop foreman needed a pair of diesel handling hooks in a hurry, he got them—in a hurry. The flame-cutting shop produced them quickly from 10 in. billets.*

The terms "Heliarc," "Oxweld" and "Unionmelt" are registered trade-marks of Union Carbide and Carbon Corporation or its Units.

No other locomotive
is so completely engineered,
built and serviced
by one organization

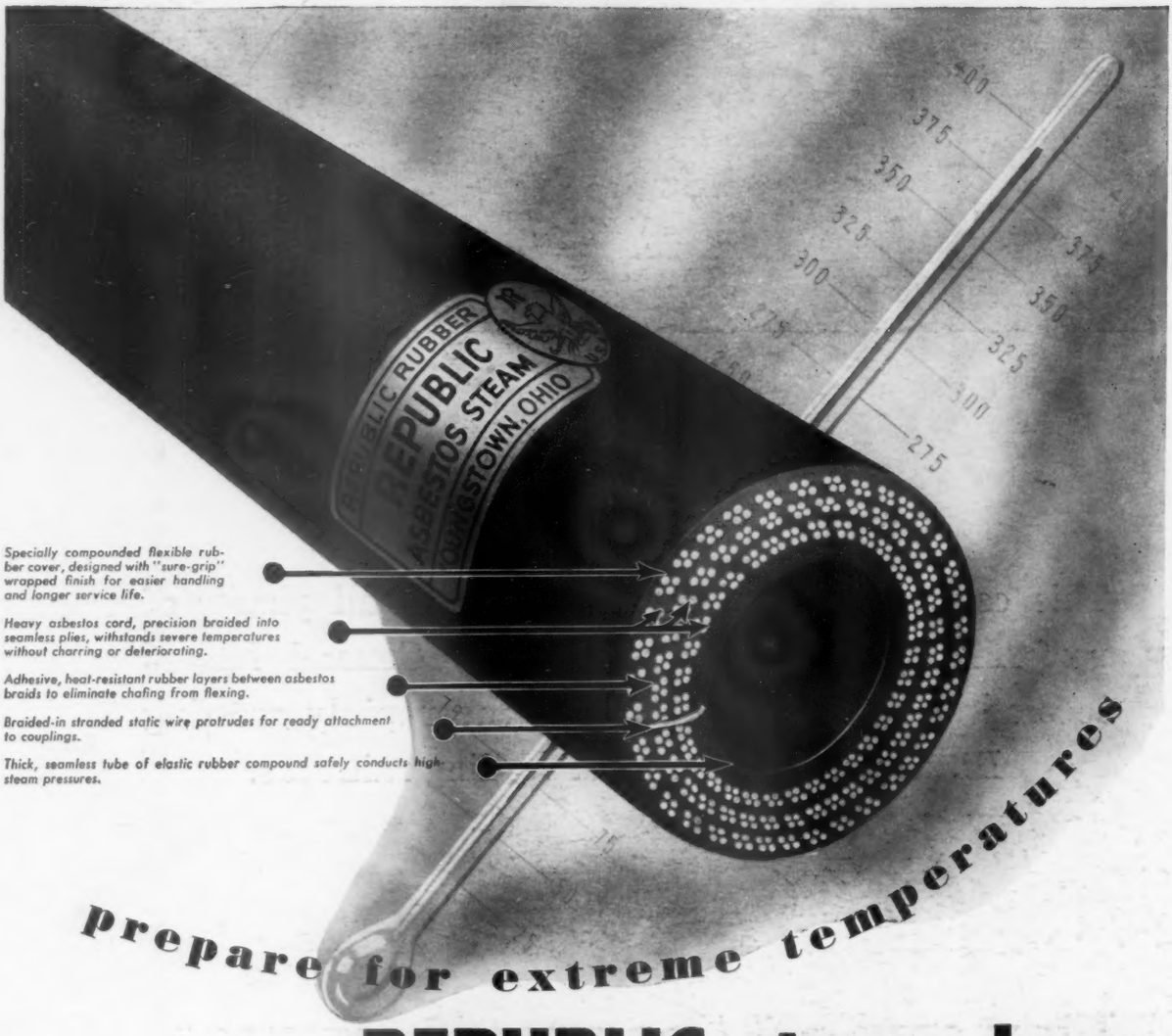
This centralization of responsibility for all phases of performance is another reason why General Motors locomotives are first choice in the rapidly growing Diesel fleets of America's leading railroads.

GENERAL MOTORS LOCOMOTIVES

# ELECTRO-MOTIVE DIVISION

General Motors, La Grange, Illinois

*Home of the Diesel Locomotive*


REPUBLIC RUBBER
REPUBLIC
ASBESTOS STEAM
YOUNGSTOWN, OHIO
400
375
350
325
300
275
Specially compounded flexible rubber cover, designed with "sure-grip" wrapped finish for easier handling and longer service life.
Heavy asbestos cord, precision braided into seamless plies, withstands severe temperatures without charring or deteriorating.
Adhesive, heat-resistant rubber layers between asbestos braids to eliminate chafing from flexing.
Braided-in stranded static wire protrudes for ready attachment to couplings.
Thick, seamless tube of elastic rubber compound safely conducts high steam pressures.

## prepare for extreme temperatures

# REPUBLIC steam hose

● Republic's braided Asbestos Steam Hose carries high pressure steam with safety and economy.

It's made to handle pressure up to 200 pounds without charring and for use on all jobs where continuous service and dependability are important to success.

Republic Asbestos Steam Hose has seamless rubber steam channels, surrounded by multiple plies of precision-braided asbestos cord.

Thick layers of specially compounded insulating rubber protect each ply against internal chafing.

Republic Asbestos Steam Hose is built with tough, flexible outside covers that resist abrasion. The special "sure-grip" cover design makes the hose easy to handle; less dangerous underfoot.

Contact your local Republic Distributor or write direct for more information about this super-duty steam carrier.

Asbestos Steam Hose is available in standard fifty-foot lengths, ready to go to work on your toughest job. And, don't forget the many other products and services available at Republic Rubber, for nearly a half century, the specialist in the field of industrial rubber.

INDUSTRIAL RUBBER PRODUCTS BY

**REPUBLIC RUBBER DIVISION**

Lee Rubber & Tire Corporation

YOUNGSTOWN, OHIO

*(Continued from page 46)*
plan the Car Service Division submitted recently to A.A.R. member roads. Through a typographical error, it was reported in *Railway Age* of October 14, page 46, that the plan related to foreign empties on lines connecting directly with those of the car owners.

## Government Improves Air Lines' Signaling Facilities

"The nation's first airways based on the revolutionary new 'omnirange' were put into operation by the Civil Aeronautics Administration this week," according to an October 19 statement from the administration. The new facilities cover approximately 4,380 mi. of airway routes.

As the C.A.A. put it, they extend through six states and connect "such important air traffic terminals as Kansas City, Mo., Denver, Colo., and Albuquerque, N. M." The statement added that Omaha, Neb., Wichita, Kan., Tulsa, Okla., Oklahoma City, El Paso, Tex., Fort Worth, "and other cities en route," are "also linked by the new type of facility."

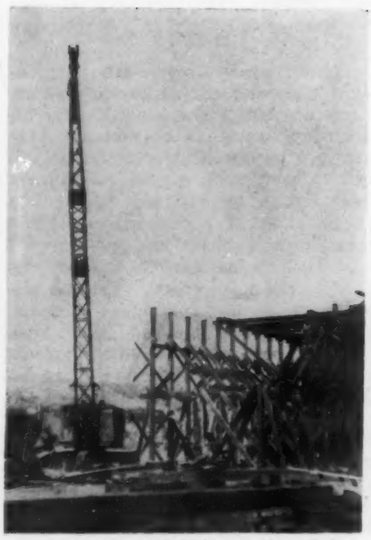
It was explained that "omnirange's" full name is "omnidirectional range," and that it differs in two major respects from the "conventional radio ranges which for 20 years have been the foundation of our air navigation system." It operates on "very high" frequency, thus "eliminating most of the static and interference which occur in low-frequency transmission"; and it sends out courses in every direction, instead of just four.

While omniranges have previously been commissioned by C.A.A. in various parts of the country, the set-up inaugurated this week was described as the first chain of such ranges to be designated by C.A.A. as a "controlled airway over which qualified pilots in properly equipped planes may operate under instrument flight rules." C.A.A. has authorized Continental Air Lines to operate on that basis.

"Ultimately," it is planned to install more than 400 omniranges, "blanketing most of the United States with their signals," the statement also said. It added that such a system "will make possible not only omnirange airways of the type just opened, but off-airway flying to hundreds of points not now served by air navigation aids."

## I.C.C. Requires Increase in N. H. Commutation Fares

The Interstate Commerce Commission has found that undue discrimination against persons and localities in interstate commerce has resulted from the New York Public Service Commission's refusal to let the New York, New Haven & Hartford increase its intrastate commutation fares to the interstate level. The I.C.C. report in the No. 30010 proceeding was by Commissioner Rogers, and it advised that



**TEARING DOWN this old coal dock was the most recent step in Dieselization of the Copper Range, on Michigan's Kewaunee Peninsula. Located at Houghton, it stored coal brought by lake vessel for railroad and mine fuel**

"an appropriate order" would be entered unless the New York commission authorized the increases within 60 days.

The commutation fares involved are those between New York City and New Haven stations in Westchester county. Present monthly charges for 60-trip books range from $12.53 to $17.96, while the range for 46-trip books is from $11.26 to $16.13. The basis approved by the I.C.C. will range, respectively, from $13.30 to $19.05 and from $12.25 to $17.55.

Commissioner Splawn filed a dissenting opinion in which he said the facts set forth in the majority report "do not justify the findings necessary to our reversal of the judgment of the New York State Commission which was based on a comprehensive investigation by that commission." Commissioner Cross did not participate in disposition of the case.

## Becomes Head Valuation Engineer on I.C.C. Staff

John E. Hansbury has been appointed head valuation engineer of the Bureau of Valuation, Interstate Commerce Commission. Mr. Hansbury has been serving as acting head valuation engineer since the retirement of the late Louis Hood in January, 1949.

## Freight Car Loadings

Loadings of revenue freight in the week ended October 14 totaled 888,559 cars, the highest since the final week of October, 1948, the Association of American Railroads announced on October 19. This was an increase of 24,883 cars, or 2.9 per cent, compared with the previous week; an increase of 304,611 cars, or 52.2 per cent, compared with the corresponding week last year; and a decrease of 24,398 cars, or 2.7 per cent, compared with the equivalent 1948 week.

Loadings of revenue freight for the week ended October 7 totaled 863,676 cars, and the summary for that week as compiled by the Car Service Division, A.A.R., follows:

REVENUE FREIGHT CAR LOADINGS
For the week ended Saturday, October 7

| District: | 1950 | 1949 | 1948 |
|---|---|---|---|
| Eastern | 145,949 | 111,632 | 158,769 |
| Allegheny | 174,796 | 90,504 | 183,154 |
| Pocahontas | 64,657 | 19,199 | 68,926 |
| Southern | 136,843 | 101,284 | 130,795 |
| Northwestern | 141,159 | 86,742 | 138,654 |
| Central Western | 135,512 | 121,419 | 140,042 |
| Southwestern | 64,760 | 43,448 | 71,311 |
| Total Western Districts | 341,431 | 251,609 | 350,007 |
| Total All Roads | 863,676 | 574,228 | 891,651 |
| Commodities: | | | |
| Grain and grain products | 51,196 | 51,919 | 48,923 |
| Livestock | 15,737 | 17,579 | 18,886 |
| Coal | 164,048 | 47,675 | 176,082 |
| Coke | 14,853 | 4,235 | 14,658 |
| Forest products | 48,399 | 39,151 | 45,157 |
| Ore | 76,686 | 11,391 | 66,642 |
| Merchandise l.c.l. | 88,565 | 88,062 | 111,902 |
| Miscellaneous | 404,192 | 314,216 | 409,401 |
| October 7 | 863,676 | 574,228 | 891,651 |
| September 30 | 879,985 | 658,128 | 908,866 |
| September 23 | 870,196 | 661,468 | 908,592 |
| September 16 | 866,207 | 743,022 | 909,989 |
| September 9 | 751,276 | 623,962 | 789,011 |
| Cumulative total 40 weeks | 29,362,938 | 28,387,206 | 33,116,686 |

**In Canada.**—Carloadings for the week ended October 7 totaled 89,273 cars, compared with 90,976 cars for the previous week, and 89,082 cars, for the corresponding week last year, according to the Dominion Bureau of Statistics.

| | Revenue Cars Loaded | Total Cars Rec'd from Connections |
|---|---|---|
| Totals for Canada: | | |
| October 7, 1950 | 89,273 | 35,312 |
| October 8, 1949 | 89,082 | 30,834 |
| Cumulative totals for Canada: | | |
| October 7, 1950 | 2,926,282 | 1,236,825 |
| October 8, 1949 | 2,987,812 | 1,230,949 |

## Keep Cutting Bad Orders, Midwest Board Urges

That railroads are doing well with their program to reduce the number of bad order cars was acknowledged by the Midwest Shippers Advisory Board in a resolution passed at its Fort Wayne (Ind.) meeting on October 12. The resolution urged there be no let-up in this program until bad order cars were reduced to, and maintained at, an "irreducible minimum." In another resolution, the board echoed action taken at the recent Denver (Colo.) meeting of the National Association of Shippers Advisory Boards by saying that the railroads' present program to augment the nation's freight car fleet by 100,000 units is not adequate. The need is for at least 150,000 cars, the resolution said.

The Midwest board also advocated an increase in per diem rentals whereby owning railroads would be compensated for their investment, depreciation and the cost of repairs. One shipper said: "It costs from $6,000 to $7,-

000 to purchase a car new — but only $75 to $80 to operate one. A two-cent-a-mile rental is far from adequate under today's conditions."

There will be no easing of the car supply into the first few months of 1951, Manager R. E. Clark of the A.A.R.'s Closed Car Section of the Car Service Division told the board. High grade box cars are in the shortest supply, he said, with gondolas, hoppers and flat cars following, in that order. Mr. Clark urged shippers to speed their billing as well as loading and unloading of cars to promote maximum car utility. Car efficiency committees, he said, can be of great help during the present shortage. The car efficiency committee of the Midwest board has been functioning since early August, having been reactivated at the July meeting of the Board.

The next meeting was announced for January 24, 1951, at the Palmer House, Chicago.

## I.C.C. Report on Sept. 11 Troop-Train Accident

"Failure to operate the following train in accordance with signal indications" caused the September 11 accident on the Pennsylvania, near Coshocton, Ohio, where the "Spirit of St. Louis" ran into the rear of a special troop train which had been stopped by a broken air hose. Division 3 of the Interstate Commerce Commission has made this finding in a report by Commissioner Patterson.

As reported in the *Railway Age* of September 16, page 79, the troop train was carrying members of the 28th Division of the Pennsylvania National Guard, and the collision resulted in the death of 33, and injury of 163, of those soldiers. Also injured were 95 passengers on the "Spirit of St. Louis," 3 railway mail clerks, 5 Pullman employees, and 12 train-service employees.

To investigate this accident, the commission followed the unusual, though not unprecedented, procedure of instituting a formal proceeding—Ex Parte No. 173. Thus it received testimony under oath at a public hearing in Pittsburgh, Pa. The latest previous formal investigation of a railroad accident was 30 years ago, in 1920. The usual commission procedure is to have train accidents investigated by its Bureau of Safety, which conducts informal inquiries, but the reports of these bureau investigations are issued as commission reports.

### Signal Indications

The point where the September 11 collision occurred is 7.45 mi. east of Coshocton and 114.9 mi. west of Pittsburgh. It is on a tangent stretch of double-track line which is part of the P.R.R. Panhandle division. Trains are operated by automatic block-signal and cab-signal indications. Both trains were westbound, and their movements were governed by automatic signals 1129 and 1149, located, respectively, 1.98 mi. and 183 ft. east of the point of accident.

These signals are of the position-light type and are approach lighted. Each displays three aspects. The aspects applicable to the present case are the "approach" aspect which indicates "proceed prepared to stop at next signal, train exceeding medium speed must at once reduce to that speed"; and the "stop-and-proceed" aspect which indicates "stop, then proceed at restricted speed." The cab signals are of the continuous-inductive, four-indication, position-light type. Their aspects applicable to the present case are "approach," the indication being the same as the like aspect of the wayside signal; and "restricting," which indicates "proceed at restricted speed."

The controlling circuits of signals 1129 and 1149 are so arranged that when the block of signal 1149 is occupied, signal 1129 indicates "approach" and signal 1149 indicates "stop and proceed." When a train enters a block at a roadway signal indicating "approach," the indication of the cab signal is the same; when the roadway signal indicates "stop and proceed," the cab signal indicates "proceed at restricted speed."

### Signal Rules

When a cab signal changes to a more restrictive aspect, a warning whistle in the cab sounds until an acknowledging foot pedal is manually operated. As the commission's report described their location, the cab signals "are so arranged that their aspects may be observed by either engineman from his accustomed position in the control compartment." P.R.R. operating rules define "medium speed" as "not exceeding one-half the speed authorized for passenger trains but not exceeding 30 m.p.h."; and "restricted speed" as "not exceeding 15 m.p.h. prepared to stop short of train, obstruction or switch not properly lined and to look out for broken rail." There is also a rule stipulating that, when trains are operating under automatic block system rules, the requirements as to rear flagging are met "when full protection is afforded against trains moving at restricted speed."

The troop train, Passenger Extra 5444 West, consisted of two steam locomotives and 20 all-steel cars in this order: 2 express cars, 5 coaches, 1 kitchen car, 5 coaches, 1 kitchen car, and 6 coaches. An emergency brake application, which was brought on by the broken air hose, stopped the train just after it passed signal 1149. Its rear end stopped 185 ft. west of that signal. About 4 min. later, at 4:42 a.m., the rear end was struck by the "Spirit of St. Louis," Train No. 31. There was a "light fog" at the time.

The "Spirit" consisted of two Diesel-electric locomotive units, coupled in multiple-unit control, and 17 cars—13 of "lightweight steel construction" and four of "conventional all-steel construction." The commission found that this train was running at 48 m.p.h. at the time of the collision, and that it had "passed signal 1129 which indicated 'approach,' passed the flagman of Extra 5444 West, passed signal 1149, which indicated 'stop and proceed.'"

### Damage to Equipment

Most of the casualties occurred in the troop train's nineteenth car, the collision having tossed aside the rear car which was the twentieth. The latter stopped on its side at right angles to the track, with its center sills broken and its superstructure at each end crushed throughout a distance of about 10 ft. Meanwhile, the nineteenth car's "entire superstructure" was torn off and "demolished," as were its trucks. "Apparently," the report also said, "the underframe of the first Diesel-electric unit of No. 31 was deflected upward and struck the nineteenth car above the floor level. Although the center sills of the nineteenth car were intact, that portion of this car above the floor level was sheared away and destroyed."

The report noted that this car's design and construction were "such that it met the present minimum strength requirements of the Association of American Railroads for new passenger cars, which requirements were adopted as standard in 1945." The car received class repairs in 1943. At that time, the report went on, "the vertical end members, or collision posts, were reinforced to the extent that the ultimate shear value, based on the area of the web and reinforcing plates at a point even with the underframe member, was equal to" the A.A.R. requirement of 300,000 lb.

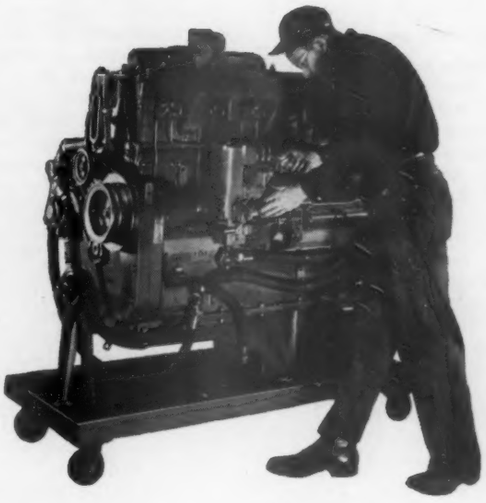
As to the troop train's other cars, the superstructure of the eighteenth was "demolished" on the east end throughout a distance of about one-fourth its length, but the thirteenth to seventeenth cars, inclusive, "sustained only slight damage." The coupler carry iron on the west end of the twelfth car was broken and the coupler dropped to the roadbed, while the coupler carry iron was down on the east end of the eleventh car. The fourth to tenth cars "sustained only minor damage."

At the head end of this train, the first car mounted the end sill of the tender of the second locomotive, and the coupler of this car passed through the end sheet of the tender. The ends of the first and second cars were bent inward, and the inside lining of these cars was loosened. The vestibule end sheets and the doors on the west end of the third car were bent.

No. 31's first Diesel-electric unit stopped on its side at right angles to the track with its rear end against the east end of the eighteenth car and the bottom of the twentieth car of the troop train. This unit, including its trucks, was "badly damaged," as were the trucks of the second Diesel-electric unit. Derailed, but "not seriously dam-

# Cummins® Custom-built Diesels

*Built not once but Twice*



**The engine that's built better to give power at lower cost**

*Why* is a lightweight, high-speed Cummins Diesel the best buy in economical, dependable power? *Because every* part of *every* engine is made under strictest quality control methods. Each engine also is actually built *twice*. After initial assembly, each engine is run-in on the test block. Then it is torn down and carefully re-inspected—after that it is re-assembled and tested *again*.

Perfection in engine craftsmanship . . . Cummins exclusive fuel system . . . an unexcelled service and parts organization . . . mean that rugged, dependable Cummins Diesels make more profits for power users.

There's a model for your power needs. Contact your Cummins dealer. He has more facts to show you about making more profits with

**Diesel power by CUMMINS**

CUMMINS Dependable DIESEL

TRADEMARK REG. U.S. PAT. OFF.

**CUMMINS ENGINE COMPANY, INC. · COLUMBUS, IND.**

EXPORT: CUMMINS DIESEL EXPORT CORPORATION
Columbus, Indiana, U. S. A. · Cable: Cumdiex

Lightweight High-speed Diesel Engines (50-550 hp) for: On-highway trucks · off-highway trucks · buses · tractors · earth-movers · shovels · cranes · industrial locomotives · air compressors logging yarders and loaders · drilling rigs · centrifugal pumps generator sets and power units · work boats and pleasure craft.

aged," were No. 31's first three cars—a storage mail car, a mail car and a baggage car, all of "conventional all-steel construction."

### Flagging Procedure

The commission's discussion of the rear flagging done to protect the troop train said that train's flagman dropped a 5-min. red fusee between the rails of the track before the train stopped. After the stop, the flagman proceeded eastward with flagging equipment consisting of red and white lights, torpedoes, and fusees.

"When he reached a point about 400 ft. from the rear of his train," the report continued, "he observed the headlight of No. 31 approaching at a distance of about ¾ mi. At that time signal 1149 was not lighted because No. 31 had not entered the approach-lighting circuit [which extends 3,612 ft. in approach of the signal]. The flagman gave stop signals with a red light and continued eastward. When No. 31 was about 2,000 ft. east of the flagman, he lighted and gave stop signals with a red fusee. The signals were not acknowledged. The flagman threw the lighted fusee at the front of the Diesel-electric unit as No. 31 passed him. At that time he observed that signal 1149 was lighted and was indicating 'stop and proceed.'"

The 5-min. fusee which the flagman had thrown off before his train stopped was still lighted after the accident occurred. Also, remains of other fusees were found, including a partially burned one "which had been struck a heavy blow." That was "apparently" the one thrown against No. 31's locomotive, the commission said.

### Heeded Signals Once

Meanwhile, the report had reviewed evidence which pointed up the fact that No. 31 had previously overtaken the troop train; and that the former's engineman had then heeded signals like those he failed to heed only a half-hour later. In the vicinity of Dennison, Ohio, 24.45 mi. east of the point of collision, the troop train had been stopped by its flagman when he became aware that something was dragging. An inspection disclosed that the steam connector on the west end of the rear car had become detached; and temporary repairs were made by suspending the connector from hooks provided for that purpose. It was this same connector that dropped again to break the air hose, thus causing the emergency-brake application which stopped the train at the point of the accident.

In proceeding to that point, after the emergency repairs, the train made a stop at Dennison to supply the engine tenders with water. While there, it was overtaken by No. 31, which was then being operated in accordance with signal indications; and its engineer acknowledged the stop signals of the troop train's flagman. Moreover, No. 31's fireman talked by trainphone with an operator who advised that the preceding train was Extra 5444 West.

After the troop train was again under way, No. 31 proceeded at gradually increasing speed; for it got "proceed" indications from all roadway signals throughout a distance of about 20 mi. east of signal 1129. The latter's "approach" indication called for a reduction to the "medium" speed of 30 m.p.h. The indication was called by the fireman, the commission said; and the change of the cab signal to "approach" brought the sound of the warning whistle. The latter was acknowledged by manual operation of the acknowledging foot pedal by the engineer.

"Both the engineer and the fireman," the report continued, "said a service application of the brakes was made to comply with the 'approach' indication of the signal. However, the speed on the descending grade gradually was increased to about 70 m.p.h. when the train was about 1 mi. east of the point where the accident occurred. Both the engineer and the fireman said that visibility was restricted by fog. The engineer said he initiated a service application of the brakes when he saw stop signals being given by the flagman of the preceding train. Immediately afterward both the engineer and the fireman observed the rear of the preceding train and the engineer, without releasing the service application, initiated an emergency application of the brakes. The speed was reduced to 48 m.p.h. when the collision occurred."

No. 31's cab-signal equipment was found to have been functioning properly. The brakes on its cars "functioned properly" in tests after the accident, except those on the west truck of the first car which were damaged as a result of the collision. The brake equipment on No. 31's Diesel units was also damaged to the point where it could not be tested. The commission found that the stopping distance of 10,250 ft. provided between signals 1129 and 1149 is "adequate" for the maximum authorized speed in the territory—70 m.p.h. for passenger trains. Also, that the troop train's flagman was back from the rear of his train about 500 ft., "which is sufficient distance to provide protection against a train moving at restricted speed." The engineer of No. 31 had passed the required physical examination on September 26, 1949.

## Gas Turbine Shipped to Dunkirk for Testing

What is described as "the world's first coal-burning locomotive gas turbine" has been shipped by the Allis-Chalmers Manufacturing Company from Milwaukee, Wis., to the Dunkirk, N. Y., plant of the Alco Products Division of the American Locomotive Company.

The turbine, rated at 4,100 hp., is to be assembled and operated in the laboratory at Dunkirk, where fuel preparation and combustion equipment for the locomotive have been under test for some time, as a project of the locomotive development committee of Bituminous Coal Research, Inc.

## Illinois Teamsters Bait Rail Brethren

In an attempt to woo the railroad brotherhoods into supporting the trucking industry's "line," members of the Illinois Teamsters Union recently passed a resolution urging the brotherhoods to "reexamine the grounds upon which the railroads are conducting their anti-truck campaign." Telling the rail brethren that "the campaign is counter to the best interests of all American workingmen and the public generally," the resolution urged them to consider "influencing railroad management to cease underhanded attacks against trucking and adhere to fair and open forms of competition only."

The teamsters declared "there is clear evidence that the railroads, with the moral sanction and financial suport of the railroad brotherhoods, have been actively circulating misleading propaganda against the trucking industry." They also urged legislators, editors, radio commentators and other persons with public responsibility to "weigh carefully, and consider the source of anti-truck propaganda." In announcing the resolution, Edward J. Loehr, secretary-treasurer of the Illinois Conference of Teamsters, said that "the teamsters unions are 100 per cent behind the trucking industry in this fight that has been forced upon us." He cited news stories which depicted trucks as "highway menaces," "highway block busters" and "subsidized competition for railroads" as examples of the "vicious" campaign against which the truck drivers were rallying.

# ORGANIZATIONS

The annual meeting of the **Car Foremen's Association of Chicago,** held on October 13 at Chicago and presided over by retiring president W. J. O'Brien, general car foreman, New York, Chicago & St. Louis, elected the following officers for the ensuing year: President, E. W. Gebhardt, assistant superintendent car department, Chicago & North Western; first vice-president, C. T. Graves, assistant chief engineer, Tank Car Division, General American Transportation Corporation; second vice-president, J. F. Monger, shop superintendent, Illinois Central; secretary-treasurer, J. A. Dingess, Mechanical Department, Union Tank Car Company.

A. E. Yarlott, general superintendent of dining service for the New York Central System, with headquarters at New York, was elected president of

# SHOPPED FOR HOURS...
## not days

*Today it is obsolete to remove the trucks or wheels from the unit for truing. Within an hour the* STANDARD WHEEL TRUING MACHINE *will restore contour, equal diameter and concentricity to both wheels of a pair simultaneously.*

Standard

**RAILWAY EQUIPMENT MANUFACTURING COMPANY**

310 South Michigan Avenue, Chicago 4 · 247 Park Avenue, New York 17

THE WORLD'S LARGEST FABRICATOR OF RAILWAY CAR SPECIALTIES

the **Association of American Railroad Dining Car Officers** on October 12, at the conclusion of the association's 50th anniversary meeting, which was held in New York. Mr. Yarlott succeeds R. G. Robinson, superintendent of the dining car department of the Pennsylvania. Other newly elected officers are: Vice-President — G. A. Cameron, manager, dining car service, Southern Pacific Lines in Texas and Louisiana, Houston, Tex.; secretary-treasurer (reelected) — W. F. Ziervogel, superintendent dining and parlor cars, Missouri Pacific Lines, St. Louis, Mo.; executive committee—H. I. Norris, assistant manager, dining car and hotel department, Union Pacific, Omaha, Neb. (chairman); W. R. Morten, superintendent, dining car and commissary, Western region, Baltimore & Ohio, Chicago, and W. H. Berghegger, superintendent dining and parlor cars, Gulf, Mobile & Ohio, St. Louis. St. Louis was selected as the place for the association's 1951 meeting.

C. J. Fagg, vice-president, Newark Central Warehouse Company, Newark, N. J., was elected president of the **Eastern Industrial Traffic League, Inc.,** at Baltimore, Md., at its annual meeting on October 13. Other officers elected are: First vice-president—G. D. Cederholm, general traffic manager, Wm. R. Warner & Co., New York; second vice-president—E. George Siedle, general traffic manager, Armstrong Cork Company, Lancaster, Pa.; treasurer—George V. Evans, traffic manager, Va.-Carolina Laundry Supply Corporation, Richmond, Va., and secretary—J. F. Curren, assistant traffic manager, Chamber of Commerce, Wilmington, Del.

H. B. Brown, Jr., of Washington, D. C., has been appointed to the public relations staff of the **Bituminous Coal Institute,** a department of the **National Coal Association.**

**Railroad Enthusiasts, Inc., New York division,** will hold its next meeting on October 25, at 7:45 p.m., in room 5928, Grand Central Terminal, New York. "The Railroads Have Competitors" will be the subject of a talk by Horace L. Lyon.

The **Metropolitan Maintenance of Way Club** will hold its first meeting of the season on October 26, at 8 p.m., in the Skyline room of the Hotel Shelburne, Lexington avenue at 37th street, New York. A. Price, division engineer on the Erie, will talk on the road's "Power Ballasting Operations." Dinner will be served at 6:30 p.m.

The **Railway Club of Pittsburgh** will hold its annual meeting, election of officers and smoker on October 26, at 8 p.m., at the Fort Pitt Hotel, Pittsburgh, Pa.

Inez M. DeVille, associate editor of the Baltimore & Ohio Magazine, at Baltimore, Md., was elected president of the **National Association of Railroad Women,** at its seventh annual convention in Swampscott, Mass., on October 3. C. W. Wright, vice-president and general counsel of the Minneapolis & St. Louis, was the principal speaker at the convention.

The **City Passenger Agents' Association of Cleveland** recently elected the following officers: President, Creath Fletcher, Chicago, Burlington & Quincy; vice-president, John P. Tilton, Chicago, Rock Island & Pacific, and secretary-treasurer, E. Paul Schilling, Chicago, Milwaukee, St. Paul & Pacific.

## SUPPLY TRADE

**Richard T. Coyne** has been appointed vice-president — laminate structure sales of the **Pressed Steel Car Company,** with headquarters at Chicago. Mr. Coyne was sales manager

Richard T. Coyne

of the Mt. Vernon Car Manufacturing Company from 1944 through 1946 and has served as sales agent for the Pullman-Standard Car Manufacturing Company since 1947.

The **H. K. Porter Company** has sold its locomotive business, including patterns, drawings, and spare parts business, to the **Davenport-Besler Corporation** (Davenport Locomotive Works), Davenport, Iowa. Davenport-Besler will service all Porter locomotives now in use and also build duplicate Porter locomotives, including Porter fireless locomotives.

**J. F. Beckman,** associated with the sales staff of the **Signode Steel Strapping Company** for 25 years, has been promoted to district manager of the New Orleans, La., district, which comprises Louisiana, Texas, Arkansas, Mississippi and parts of Alabama, Florida and Tennessee. Mr. Beckman joined Signode in 1925. In 1932 he was assigned to a territory in northeastern United States, with headquarters at Portland, Me. When the Los Angeles, Cal., district was established in 1943, he was transferred there as district manager, the position he held until his recent promotion.

The company also has announced the appointment of **John Hoffman,** sales representative in the Providence, R. I., territory since 1944, as special sales representative to assistant manager of the Boston, Mass., district.

**R. J. Schneider** has been appointed manager, railroad materials department, of the **Georgia-Pacific Plywood & Lumber Co.,** Augusta, Ga., with headquarters at 332 South Michigan avenue, Chicago. Mr. Schneider

R. J. Schneider

formerly was vice-president of the Berwyn Lumber Company of Chicago, with which he was associated for 15 years. Before that time he was sales manager for the Chicago Lumber Sales Company.

**William J. Butler,** who has been appointed general counsel of **Pullman, Inc.,** as reported by *Railway Age* on October 14, was born at Ottawa, Ill., on November 9, 1889, and was graduated in law from Georgetown University in 1915. He has been admitted to practice in the state and federal courts of Illinois, in the District of Columbia, and before the Interstate Commerce Commission and the Tax Court of the United States. Mr. Butler served with the I.C.C. at Washington, D. C., from 1912 to 1916, when he joined the law firm of Winston, Strawn & Shaw at Chicago. In 1921 he entered the service of the Pullman Company and served as assistant general attorney until December, 1941, when he was appointed general attorney. He was promoted to general counsel in August, 1947, which position he held at the time of his recent appointment with Pullman, Inc.

**Charles F. Palmer, Jr.,** formerly district manager of the **Garlock Packing Company,** at St. Louis, Mo., has been appointed district manager at Philadelphia, Pa., succeeding the late **Leo P. Duggan. A. C. Gustafson,** formerly representative at Hous-

# IT TAKES ALL 3...

## *to keep your Diesels at Peak Efficiency!*

No one knows all the answers to the problems arising from modern railroad Diesel operation. They are so varied, so complex.

But, through the cooperation of builders, operators, and oil suppliers, many of these problems have been solved...others are being solved every day.

We have been part of this cooperative research effort ever since we lubricated Dr. Diesel's first engine . . . and we're working even harder today! As a result, we have come up with new lubricating oils which contain all the known desirable properties for railroad operation. These oils are being used with exceptional results on many major roads today!

Our broad experience, our research facilities and our new products are available to you now to improve *your* Diesel operations. Give us a call.

SOCONY-VACUUM OIL CO., INC., RAILROAD DIV., 26 Broadway, New York 4, N.Y.

SOCONY-VACUUM

Railroad Lubricants

# SOCONY-VACUUM

*Correct Lubrication*

WORLD'S GREATEST LUBRICATION KNOWLEDGE AND ENGINEERING SERVICE

ton, Tex., has been appointed district manager at St. Louis, to succeed Mr. Palmer.

**E. L. O'Rourke** has been elected a vice-president of the **T. J. Moss Tie Company.** Mr. O'Rourke has been associated with the Moss organization since June, 1923, when he joined the company in a clerical capacity. In January, 1940, he became engaged in sales work and on July 11, 1941, was appointed manager of the pole department, with supervision over production and marketing of poles and piling. As vice-president he will devote most of his time to sales activities.

E. L. O'Rourke

### OBITUARY

**William T. Hanna,** president of the Hanna Stoker Company, died recently at his home in Cincinnati, Ohio, following a brief illness. Mr. Hanna was born on April 13, 1868. He started working on development of locomotive stokers in 1905, and was continuously engaged in that business until the time of his death.

**Edward W. Kavanagh,** manager, sales and service, railway division, southern region, of the Manganese Steel Forge Company, Philadelphia, Pa., died recently after a short illness. Before his recent association, he was for over 20 years sales manager of the Ulster Iron Works, Dover, N. J.

## CONSTRUCTION

**Atchison, Topeka & Santa Fe.**—A contract covering installation of electrical wiring in the signal and mechanical buildings in the hump yard at Pueblo, Colo., has been awarded to the Hill Electric Company, of Wichita, Kan. The placing of a concrete pit and oil tank at the 18th Street powerhouse in Chicago has been covered by a contract awarded to the Ellington Miller Company, of Chicago. The Guy H. James Construction Company, of Oklahoma City, Okla., has been awarded a contract covering relocation of some 9 mi. of line between Kopperl, Tex., and Blum because of the construction of Whitney dam.

**Pennsylvania.**—Herman V. Pevler, vice-president of this road at New York, has announced construction of a new freight yard, estimated to cost over $1,356,000, at Adams, North Brunswick township, N. J., adjacent to the P.R.R.'s 4-track electrified main line between New York and Philadelphia, Pa. The improvements, already underway, will include immediate laying of more than 6 mi. of new track, eventually to be expanded to over 8 mi. Also included will be 30,000 cu. yd. of grading; electrification of yard trackage; installation of a new electro-pneumatic interlocking plant at County tower; and servicing and maintenance equipment for Diesel-electric locomotives, including two 8,000-gal. oil storage tanks, a sanding tower and an inspection pit. The area will be floodlighted for around-the-clock operation. The job, major part of initial construction of which is scheduled for completion by next March 1, will be under general supervision of L. P. Struble, chief engineer, Eastern region, at Philadelphia.

**Southern.**—This road will build a new yard, costing approximately $9,000,000, at Irondale, Ala., to serve the Birmingham area. Work now being performed at the 37th Street and Finley yards and at Finley locomotive shop will be transferred to the new facility when it is completed, which, it is estimated, will take two years.

When it goes into service the new yard will have complete facilities for receiving, classifying and forwarding trains and for making running repairs to locomotives and cars.

## EQUIPMENT AND SUPPLIES

### FREIGHT CARS

The **New York Central System** has ordered 7,000 freight cars costing an estimated $38,100,000. The orders were placed as follows: American Car & Foundry Co., 1,000 55-ton hopper cars; Pullman-Standard Car Manufacturing Company, 1,000 55-ton hopper cars; General American Transportation, 1,000 70-ton hopper cars; Greenville Steel Car Company, 500 70-ton 52½-ft. gondola cars; Bethlehem Steel Company, 1,000 70-ton 52½-ft. gondola cars; Despatch Shops, 2,000 40½-ft. box cars and 500 50½-ft. box cars. One thousand box cars and 500 gondola cars are for the affiliated Pittsburgh & Lake Erie.

The Central also has inaugurated a 53-hr. work week for employees of its four major freight car repair shops, Gustav Metzman, president, said, to provide immediately a maximum number of available cars. The 2,300 men employed in repair shops at Buffalo, N. Y., Beech Grove, Ind., Avis, Pa., and Ashtabula, Ohio, are now working nine hours daily and eight hours on Saturday.

The **West India Fruit & Steamship Co.,** which operates freight-car ferries between the port of Palm Beach, Fla., and Havana, Cuba, has ordered 150 40-ft. box cars from the American Car & Foundry Co. Delivery of the cars, to be placed in the box car pool of American railroads to offset cars in transit between this country and Cuba, is scheduled for the second quarter of 1951.

### LOCOMOTIVES

The **Chicago, Milwaukee, St. Paul & Pacific** has ordered six 4,800-hp. Diesel-electric freight locomotives from Fairbanks, Morse & Co. Delivery is scheduled for April, 1951.

## FINANCIAL

**Bangor & Aroostook.**—*Common Stock Dividend.*—This road has declared a special year-end dividend of $1 a share on its common stock, payable December 11 to stockholders of record November 20. The last previous payment on this stock was 50 cents a share on October 1, 1939. Curtis M. Hutchins, president, said the directors felt that, with the bond refinancing program now completed, earnings for the year would justify the dividend and still provide necessary cash for improvements and to meet other obligations.

**Boston & Providence.**—*Operation by New Haven.*—Reporting on reconsideration in Finance Docket No. 12131, the Interstate Commerce Commission has affirmed findings of a prior report wherein its Division 4 refused to sanction this road's plan for obtaining more favorable arrangements for operation of its properties by the New York, New Haven & Hartford. The plan involved two applications, one of them a request for a commission determination, under section 1(18)-(20) of the Interstate Commerce Act, that public convenience and necessity permitted abandonment of the B.&P. line "in the absence of a determination . . . of the terms and conditions under which the same shall be operated." The other application, filed pursuant to section 5 (2), asked the commission to "direct" operation of B.&P. lines by the New Haven and to (*Continued on page 61*)

# *Latest Type* COMMONWEALTH BOX-EXPRESS CAR TRUCKS

Missouri Pacific Box-Express Car
with latest type Commonwealth BX Trucks

## Offer Many Advantages For Commodity Cars In Passenger Train Service . . .

Especially designed to meet the demand for a safe, rugged, practical, light-weight truck for Box-Express Cars operating in passenger train service, this newest type COMMONWEALTH Equalized Swing-Motion Truck provides a smoother riding car with greatly reduced upkeep costs.

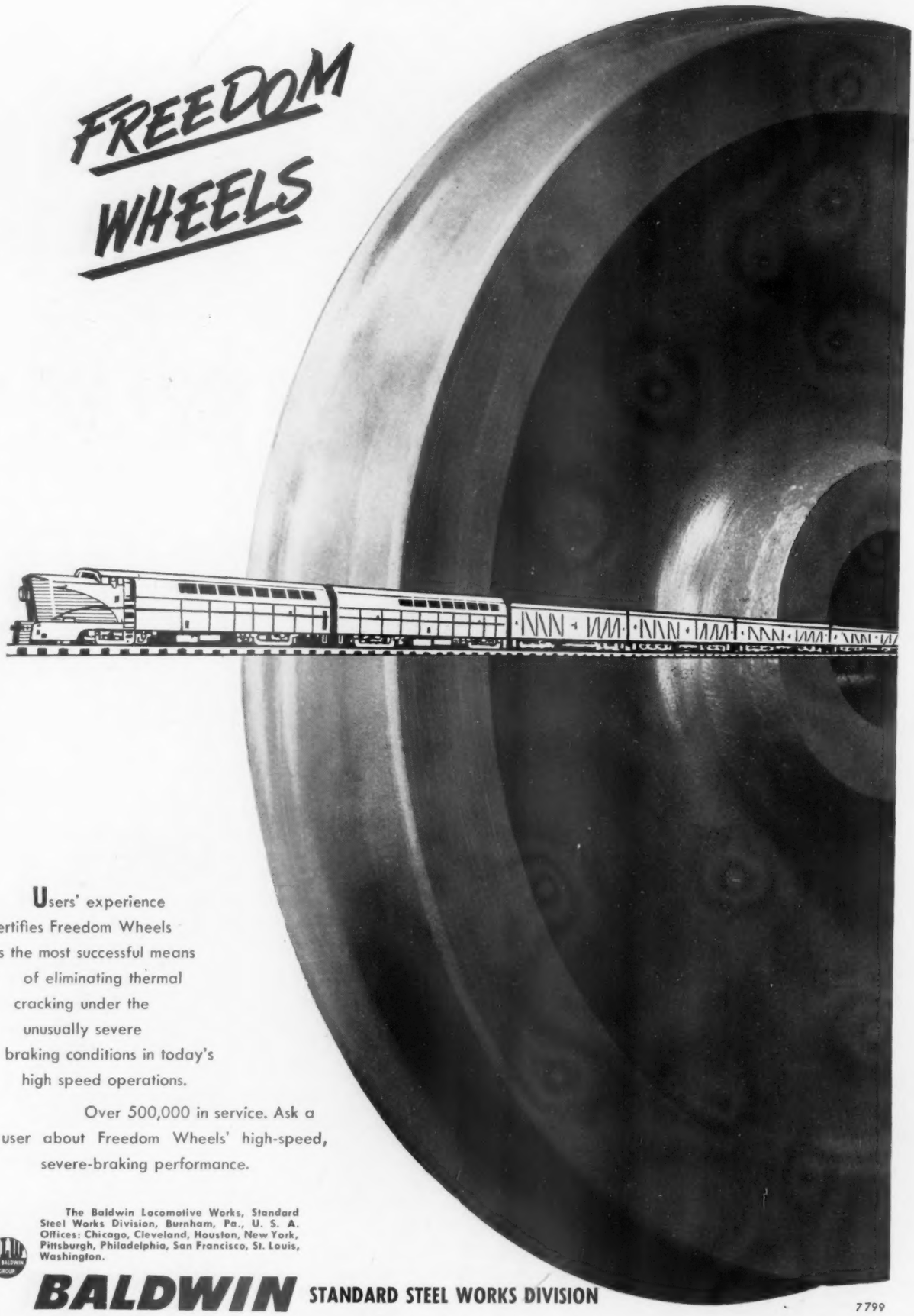
The swing bolster arrangement permits effective lateral control, assuring smoother riding with less shock and damage to car contents, car body and track structure. The one-piece cast steel truck frame, with integral pedestals machined, insures that the axles are kept in tram at all times, which is most desirable whether plain bearings or roller bearings are used. The COMMONWEALTH Trucks may be arranged for either clasp or single shoe type brakes.

For true economy and dependability it will pay you to apply COMMONWEALTH BX Trucks to your express, refrigerator and merchandise cars in passenger train service.

**GENERAL STEEL CASTINGS**

GRANITE CITY, ILL. • EDDYSTONE, PA.

# FREEDOM WHEELS



Users' experience certifies Freedom Wheels as the most successful means of eliminating thermal cracking under the unusually severe braking conditions in today's high speed operations.

Over 500,000 in service. Ask a user about Freedom Wheels' high-speed, severe-braking performance.

The Baldwin Locomotive Works, Standard Steel Works Division, Burnham, Pa., U. S. A. Offices: Chicago, Cleveland, Houston, New York, Pittsburgh, Philadelphia, San Francisco, St. Louis, Washington.

**BALDWIN** STANDARD STEEL WORKS DIVISION

7799

(*Continued from page 58*)
fix terms and conditions for such operation from and after September 18, 1947, the date of consummation of the New Haven's reorganization under section 77 of the bankruptcy act.

Pursuant to an order of the U.S. District Court for the District of Connecticut, which handled the New Haven reorganization, that road has continued to operate the B.&P. for the account of the latter. The B.&P. trustee objects to that arrangement, and he supported his applications with a contention, among others, that the Connecticut court's authority ended with consummation of the New Haven plan. Relying on court rulings, the commission's Division 4 concluded that the Connecticut court had properly retained jurisdiction, since the New Haven plan is not yet fully consummated, the loose end being that phase which contemplates acquisition of the B.&P.

Thus the division dismissed the section 5(2) application, but left the abandonment application pending. As to the latter, the division explained that going forward with the abandonment proceeding "in no way trespasses upon the jurisdiction of the Connecticut district court." (See *Railway Age* of April 8, page 714.) These are the determinations which the entire commission has affirmed.

**Mississippi & Skuna Valley.**—*Use of I.C. Trackage.*—Division 4 of the I.C.C. has granted this road authority to operate temporarily over 1.9 mi. of abandoned Illinois Central tracks between Bruce Junction, Miss., and Coffeyville. Use of this segment will permit the roads to continue traffic interchange arrangements which would otherwise be disrupted by completion of a new I.C. line being constructed in the area. The U. S. government, which is relocating the I.C. line, is expected to construct a new line for the M.&S.V., also. A government dam and reservoir project near Bruce Junction will eventually inundate the old lines of both roads.

**Western Maryland.**—*Recapitalization Plan.*—This road has asked the I.C.C. for approval of a recapitalization plan which would provide, among other things, for the elimination of accrued dividends totaling $24,217,830, or $136.50 a share, on the road's 5 per cent cumulative first preferred stock. Under the plan, the road would issue three new classes of stock which would be offered in exchange for present stock. Consummation of the plan would reduce total capitalization from $77,167,098 to $66,008,487.50, the road said. It added that the plan would also bring the capital structure in line with assets and earning capacity, and would improve the road's credit standing.

As outlined in the application, the new stock to be issued would be as follows: 5 per cent first preferred, par value $100, cumulative to 15 per cent; 4 per cent second preferred, par value $100, non-cumulative; and common stock of par value $25. In exchanging for old stock, the road would offer 1.4 shares of the new first preferred, 1 share of new second preferred, and 1½ shares of common for each share of the old first preferred. For each share of the old second preferred, the road would offer ¼ share of new second preferred and 1¼ shares of new common; and for each share of old common stock the road would offer 1 share of new common. All of the old stock has a par value of $100 a share.

The completion of these various exchanges would result in outstanding stock consisting of 248,388 shares of first preferred, 192,765.5 shares of second preferred, and 875,725.5 shares of common. On the basis of anticipated earnings of $4 million annually, the road said, the changes in capitalization would make possible the payment of dividends on all stock.

The road also said in its application that if and when the I.C.C. approves the plan, it will then seek the approval of its stockholders. In this connection, it was noted that the Baltimore & Ohio is the largest W. M. stockholder, having 94.2 per cent of the present first preferred stock, 13 per cent of the second preferred, and 29.8 per cent of the common.

## Security Price Averages

| | Oct. 17 | Last week | Last year |
|---|---|---|---|
| Average price of 20 representative railways stocks | 49.17 | 48.15 | 39.02 |
| Average price of 20 representative railway bonds | 95.95 | 95.60 | 86.79 |

## Dividends Declared

Bangor & Aroostook.—common (resumed), $1, payable December 11 to holders of record November 20; 5% preferred, $1.25, quarterly, payable January 2 to holders of record December 12.

Northern (New Hampshire).—$1.50, quarterly, payable October 31 to holders of record October 11.

# RAILWAY OFFICERS

### EXECUTIVE

**T. E. McAndrews,** vice-president of the VIRGINIAN at Norfolk, Va., has been granted a leave of absence. All business heretofore handled by Mr. McAndrews should be addressed to **H. C. Mitchell,** traffic manager.

**T. A. Tweedy,** chief clerk to Vice-president **Sydney F. Small** of the NORFOLK & WESTERN at Roanoke, Va., has been appointed assistant to vice-president, a new position. The position of special representative in the vice-president's office has been abolished.

**Rufus M. Markland** has been appointed assistant to vice-president of the CHESAPEAKE & OHIO at Richmond, Va., as announced in the *Railway Age* of October 14. Mr. Markland was born on October 16, 1894, in Advance, N. C., and entered the service of the C.&O. in the general baggage agent's office at Richmond in December, 1912, but transferred to the office of the general

**Rufus M. Markland**

manager four years later. He was chief clerk to the executive vice-president before his promotion to assistant to general manager in February, 1947.

### FINANCIAL, LEGAL & ACCOUNTING

As announced by *Railway Age* on September 16, **Leo J. Gosney,** general auditor of the WESTERN PACIFIC, has been elected also comptroller, with headquarters as before at San Francisco, Cal. Mr. Gosney was born in Lyonsville, Cal., September 3, 1903, and entered railroad service in 1919, when he joined the Sacramento Northern at Sacramento, Cal. He was subsequently employed for a time by the Southern Pacific, rejoining the S. N. in 1923. He was later advanced to head accountant of the latter road, and in 1931 joined the W. P. when it took over the accounting for the S. N. In 1937 he was advanced to traveling accountant, and in 1940, to special accountant for the general auditor. Mr. Gosney was promoted o assistant gen-

**Leo J. Gosney**

eral auditor in July, 1946, and in June, 1948, became general auditor.

As *Railway Age* reported on September 23, **W. P. Heuel,** auditor of station accounts and overcharge claims of the CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC, has been advanced to assistant comptroller, with headquarters as before at Chicago. Mr. Heuel was born on September 30, 1895, in Chicago, where he attended evening classes at DePaul University's School of Commerce. He began service with the Milwauke in September, 1912, in the freight accounting department at Chicago. In 1921 he was appointed assistant freight auditor, and in 1923 became auditor of overcharge claims. Mr. Heuel had been serving as auditor of station accounts and overcharge claims since November, 1944.

## OPERATING

As announced in the *Railway Age* of September 9, **Joseph R. Strother** has been appointed general superintendent of the New Brunswick district of the CANADIAN PACIFIC at St. John, N. B. Mr. Strother started his railway career 38 years ago as an office boy in his native Montreal, Que. His entire railway service has been in the operating department, in which he spent 16 years in Montreal before becoming, in 1934, chief clerk to the vice-president and general manager at

**Joseph R. Strother**

Winnipeg, Man. In the same year he became assistant superintendent at Lethbridge, Alta., subsequently transferring to the Medicine Hat, Alta., and Calgary, Alta., divisions. He was promoted to superintendent of the Saskatoon division in 1942, transferring to Edmonton in 1945, where he remained until his recent promotion. Mr. Strother served overseas in World War I with the 3rd Battery, Royal Canadian Artillery.

As *Railway Age* reported on September 9, **William J. Whalen** has been promoted to general manager, Lines East, of the CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC, with headquarters at Chicago. Mr. Whalen was born on March 22, 1893, at Lansing, Iowa, beginning railroad service in 1906 as a construction gang water boy on the Milwaukee. He was advanced in 1909 to timekeeper for a maintenance of way gang, in 1911 to assistant foreman of a maintenance of way and construction gang, and in 1915 to foreman. During the years 1916-1923, he served as roadmaster at McGregor, Iowa, Dubuque, and Savanna, Ill. Mr.

**William J. Whalen**

Whalen next served as trainmaster and roadmaster at Joliet, Ill., being transferred in 1926 to Montevideo, Minn., as trainmaster. He later held that position at various points prior to his advancement in 1934 to assistant superintendent at Perry, Iowa. He was promoted to superintendent at Terre Haute, Ind., in 1937, and transferred to Savanna in 1940 and to La Crosse, Wis., in 1942. Mr. Whalen was further advanced in June, 1946, to general superintendent at Milwaukee, Wis., and in November, 1948, to assistant general manager, Lines East, in which capacity he was serving at the time of his recent promotion.

**Homer B. Bassett,** who has been appointed assistant general superintendent transportation of the GREAT NORTHERN, with headquarters at Seattle, Wash., as *Railway Age* reported on September 30, was born in Travis County, Tex., on January 19, 1892. Mr. Bassett received his higher education at the University of Illinois. During World War I he served in France as a first lieutenant. He began his railroad career in August, 1908, with the Midland Valley, and the following year joined the G. N. as a clerk in the King Street station coach yard at Seattle. His subsequent positions included those of stenographer in the superintendent's office at Whitefish, Mont., and Everett, Wash., and secretary to the general superintendent of the G. N. at Seattle and to the general manager of the Spokane, Portland & Seattle at Portland, Ore. In 1919 Mr. Bassett became inspector of transportation, later holding the positions successively of secretary to president, chief clerk to general superintendent transportation and trainmaster. Prior to his recent appointment he was serving as car service agent at Seattle.

**W. L. Eubank,** formerly assistant superintendent, freight claim prevention, of the SOUTHERN, with system jurisdiction and headquarters at Washington, D. C., was recently appointed superintendent, freight claim prevention, with headquarters at Chattanooga, Tenn.

**A. R. Schroeder** has been appointed assistant supervisor of loss and damage prevention of the NEW YORK CENTRAL at Detroit, Mich.

**James H. Hollenbeak,** who has been advanced to terminal superintendent of the CHICAGO, ROCK ISLAND & PACIFIC, at Kansas City, Kan., as reported in the September 9 *Railway Age*, was born on July 19, 1902, in Hannibal, Mo. Mr. Hollenbeak began railroading in 1918 with the Chicago, Burlington & Quincy in his home town, serving with that road as call boy, yard clerk, switch tender, switchman and yardmaster until November, 1928. Sub-

**James H. Hollenbeak**

sequently he joined the Rock Island as switchman at the Tri-City terminal, and in 1937 became yardmaster at Rock Island, Ill. Following service as night terminal trainmaster at Silvis, Ill., from 1947 to 1948, he was made day terminal trainmaster at that point. In January of this year he was appointed assistant superintendent at Armourdale yard, Kansas City, the post he held until his recent advancement.

**Frank Hubbard Cook,** assistant general manager of the MISSOURI PACIFIC's Texas-Louisiana lines, at Palestine, Tex., has retired on account of ill health. He is succeeded by **Ralph Johnson,** who has been acting assistant general manager for more than a year. Mr. Cook was born on November 6, 1890, at Seguin, Tex., where he attended high school. He entered M. P. service in April, 1913, as an instrumentman at San Benito, Tex., and later the same year became a transitman at

# TIDE WATER ASSOCIATED Salutes...

# the Lehigh Valley Railroad's New Diesel-Electric Tug Fleet

The most modern tug fleet in New York Harbor... part of Lehigh Valley's forward thinking in supplanting outmoded equipment with faster, more economical motive power on both land and water.

Tide Water Associated is proud that the Lehigh Valley Railroad selected Tycol Diesel oils and fuels to service these outstandingly fine boats.

Thoroughly familiar with the problems involved in Diesel engine operation, Tide Water Associated has worked uninterruptedly for many years to develop new and better lubricating oils and fuels for more efficient and economical operation.

There is a complete line of Tycol lubricants... over which Tide Water Associated has complete control... from drilling field, through transportation to refineries, where only the most advanced refining processes are employed. This complete control enables Tide Water Associated to produce exceptional high-quality, specialized oils that provide peak efficiency and lowest operating costs.

For example, the new Tycol Adeltran Oils were developed expressly to meet the specific needs of railroad, and certain marine and stationary Diesel operation.

Your nearest Tide Water Associated office will gladly help you select the lubricant... or fuel oil... best suited to the requirements of your particular operation.

TYCOL
INDUSTRIAL LUBRICANTS

Boston • Charlotte, N. C. • Pittsburgh • Philadelphia • Chicago
Detroit • Tulsa • Cleveland
San Francisco • Toronto, Canada

TIDE WATER ASSOCIATED OIL COMPANY
17 BATTERY PLACE · NEW YORK 4, N.Y.

that point. From 1917 to 1925, he held positions as assistant engineer at Kingsville, Tex., office engineer at Houston, division engineer at Kingsville and locating engineer at San Benito. He subsequently returned to Kingsville as division engineer, and in 1926 was transferred to San Antonio, Tex. Later Mr. Cook served successively as trainmaster at North Pleasanton, Tex., Taylor and San Antonio, becoming division engineer at Palestine in 1932. The same year he was promoted to assistant chief engineer at Palestine, and in 1941 was advanced to superintendent at that point. He was granted a sick leave in December, 1947, and returned to Palestine as superintendent in April, 1948. In March, 1949, he was further promoted to assistant general manager of the Texas-Louisiana lines. Mr. Cook was granted a leave of absence from this position because of ill health in July, 1949, at which time his duties were assumed by Mr. Johnson.

Mr. Johnson was born on December 4, 1898, at Vermillion, Kan. He entered M. P. service in January, 1916, as a crew caller on the Northern Kansas division, and subsequently held such positions as telegrapher and extra dispatcher, dispatcher and division trainmaster, and assistant trainmaster on the Southern Kansas division. He was appointed division trainmaster of the International-Great Northern (part of the M. P. Lines) in 1928 at Palestine, and became trainmaster at San Antonio in 1930. From 1932 to 1940, he served alternately on the Kingsville division of the Gulf Coast Lines (also M.P.) as assistant trainmaster and on the Palestine division of the I.-G.N. as division trainmaster. Subsequently Mr. Johnson held the position of trainmaster on the Freeport Valley and the Houston & Brazos Valley (both M. P.)

Ralph Johnson

until 1941, when he was transferred to Palestine. He was advanced to assistant superintendent of the Coast Lines at DeQuincy, La., in April, 1944, and became superintendent on the Palestine and San Antonio divisions in December, 1947. In April, 1948, Mr. Johnson returned to DeQuincy as assistant superintendent, and in March 1949, was appointed superintendent at Palestine. In July of the same year, he became acting assistant general manager at that point.

**Ed H. Bailey,** superintendent of the UNION PACIFIC's Wyoming division, has been appointed general superintendent of the road's Eastern district, with headquarters as before at Cheyenne, Wyo. He succeeds **V. W. Smith,** who is now on special assignment with the labor relations board at Chicago. Advanced to succeed Mr. Bailey is **C. J. Colombo,** assistant superintendent at Green River, Wyo.

**E. T. Truman,** who has been advanced to superintendent of the CANADIAN PACIFIC, with headquarters at Edmonton, Alta., as *Railway Age* reported on September 9, started with the C. P. in 1911 at Lindsay, Ont. During World War I, Mr. Truman served overseas from 1916 to 1919. Subsequently he held the positions of operator and agent at various points in Ontario, including Belleville and Kingston. He was first appointed assistant superintendent in 1945 for the Trenton division, on which he served also as acting superintendent. He became assistant superintendent of the London division at Windsor, Ont., in April, 1948, in which capacity he was serving prior to his recent promotion.

E. T. Truman

Effective November 1, the NEW YORK CENTRAL SYSTEM has announced the following changes in its operating department occasioned by the retirement of **Frank McElroy,** general manager, Michigan Central district, at Detroit, Mich., after 51 years of service: **K. A. Borntrager,** general manager at Cincinnati, Ohio, transferred to the M.C. district as Mr. McElroy's successor; **E. J. Gibbons,** assistant general manager, Lines West district and Ohio Central Lines, at Cleveland, Ohio, advanced to succeed Mr. Borntrager at Cincinnati, with jurisdiction over the Big Four district, the Peoria & Eastern and the Louisville & Jeffersonville Bridge & Railroad; **W. P. Davis,** superintendent of the Western division, Lines West district, and of the West division, Michigan Central district, at Chicago, promoted to succeed Mr. Gibbons; **E. C. Johnson,** superintendent of the Illinois division, at Mattoon, Ill., transferred succeeding Mr. Davis; **J. D. King,** assistant superintendent of the Ohio division, at Springfield, Ohio, advanced to replace Mr. Johnson; **D. B. Fleming,** assistant superintendent of the Ohio Central division, at Charleston, W. Va., appointed Mr. King's successor, and **L. M. Riley,** assistant to vice-president, Lines West, with headquarters at Chicago, appointed to succeed Mr. Fleming.

## TRAFFIC

**B. A. Bates** has been appointed general industrial agent of the CENTRAL OF GEORGIA at Atlanta, Ga., succeeding **Erle Cocke, Jr.,** resigned. **C. L. Deal** has been appointed assistant general industrial agent at Atlanta, Ga.

**Francisco C. Lona,** who has retired as passenger traffic manager of the NATIONAL OF MEXICO, with headquarters at Mexico, D. F., as announced by *Railway Age* on September 9, was born on November 9, 1898, in Gomez Palacio, Durango. Mr. Lona attended high school in Mexico City, and subsequently went to the Springfield (Mass.) Y.M.C.A. College. During the years he was located at New York, he took a number of evening courses at Columbia University, and after his transfer to Chicago completed a two-year course at the College of Advanced Traffic, receiving his diploma as freight traffic manager. Mr. Lona entered the service of the N. of M. in 1914, and in 1915 went with the purchasing department of the Constitutionalist of Mexico at El Paso, Tex. In 1916, after Pancho Villa (Mexican revolutionary general) was defeated, Mr. Lona returned to Mexico City, where he remained until 1917. After completing his education in Springfield, in 1920 he again joined the N. of M. as secretary to the general agent at New York. In 1923 he was appointed traveling freight and

Francisco C. Lona

passenger agent, and in 1928 became general agent at Chicago. He was advanced to assistant to passenger traffic manager at Mexico City in 1932. From 1936 to 1947 he served as assistant passenger traffic manager, subsequently being promoted to passenger traffic manager.

**Robert Logan Brown,** who has been advanced to general freight agent of the MISSOURI PACIFIC LINES, with headquarters at St. Louis, Mo., as *Railway Age* reported on September 30, was born on November 7, 1902, in Nashville, Tenn., and received his L.L.B. degree from Washington University Law School. Mr. Brown began railroading in August, 1919, with the St. Louis-San Francisco, with which road he held various positions until September, 1924, when he joined the M. P. Lines as clerk in the division traffic office at Fort Smith, Ark. After serving in various clerical posts at that point and at Little Rock, Ark., and St. Louis, in March, 1943, he was granted a leave of absence to enter government service. Mr. Brown served as assistant chief and later chief of the Inland Traffic Section of the Foreign Economic Administration at Washington, D. C., returning to the M. P. in November, 1945. In January, 1946, he was appointed assistant general freight agent at St. Louis, in which capacity he handled rates on export, import and coastwise traffic. He was appointed to the same post in February, 1949, with similar duties covering principally domestic traffic in Southwestern and Western Trunk Line territories, remaining in that position until his recent promotion.

**Lloyd H. Davis** has been appointed district freight agent of the SOUTHERN PACIFIC LINES at Detroit, Mich.

**Frank Wilson,** general freight agent of the TEXAS & PACIFIC at Dallas, Tex., has been appointed assistant freight traffic manager. Succeeding Mr. Wilson is **M. L. Craig,** assistant general freight agent at Dallas. **W. G. Harris,** assistant general passenger agent at that point, has been appointed general passenger agent. All three men will be headquartered at Dallas. The positions formerly held by Messrs. Craig and Harris have been abolished. Mr. Wilson was born at Paris, Tex., on December 14, 1897. He began railroading with the T. & P. in July, 1920, as a clerk in his home town, and two years later became soliciting freight agent at New Orleans, La. From 1924 to 1926 he served as traveling freight agent, with headquarters at Texarkana, Tex., subsequently being appointed general agent at that point. After holding the same position at Fort Worth, Tex., from July, 1938, to October, 1945, he was transferred to Dallas as assistant general freight agent, and in February, 1946, was promoted to general freight agent.

● Throughout the mighty railroad network that crisscrosses the country, Lamson quality fasteners perform countless important tasks behind the scenes. On locomotives and cars, on platforms and hand trucks, in fact on most railroad equipment, you'll find Lamson Railroad-Engineered bolts, nuts and screws.

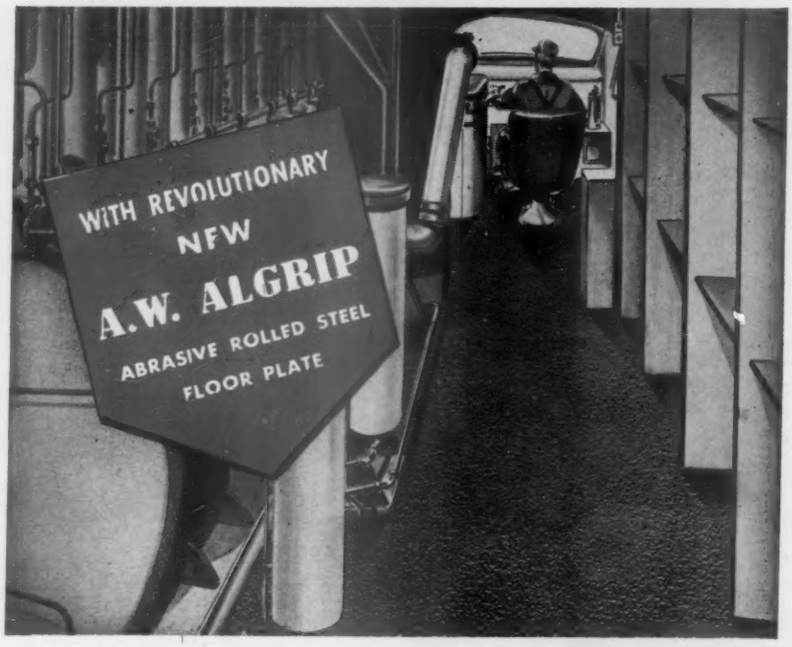
Yes, you're on the right track when you specify Lamson quality fasteners for *every* railroad need. It's the *complete* line that always delivers *complete* satisfaction.

RAILROAD SALES DEPARTMENT
*The* LAMSON & SESSIONS *Co.*
General Offices: 1971 West 85th St., Cleveland 2, Ohio
*Plants at Cleveland and Kent, Ohio • Birmingham • Chicago*

**LAMSON & SESSIONS**
FASTENERS THAT KEEP PACE WITH RAILROAD PROGRESS

(*Railway Officers continued on page 66*)

# NOW RAILROADS CAN END COSTLY SLIPPING ACCIDENTS PERMANENTLY



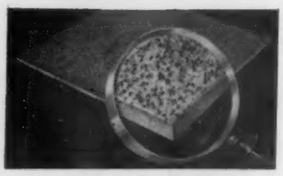

## *Non-Slip Even on Steep Inclines*

Now, for the first time, Railroads can protect both passengers and employees from dangerous slipping accidents with A.W. ALGRIP ABRASIVE Rolled Steel Floor Plate.

A.W. ALGRIP is made by rolling abrasive grain, the same type used in grinding wheels, as an integral part of the upper portion of steel floor plate. Wet or dry, A.W. ALGRIP prevents slipping, even on steep inclines. It retains its non-slip qualities for a lifetime because as the surface wears new abrasive particles are constantly exposed.

A.W. ALGRIP is ideal for installation on freight and passenger platforms, ramps, walkways, bridges, catwalks, signal towers and on rolling stock. A.W. ALGRIP, unlike other abrasive flooring, is light in weight but high in strength. It stands severe abuse without cracking and is not damaged by heat, fire or heavy traffic.

*Write or use Coupon for Complete information and 8-page descriptive booklet today.*



*Even distribution of Abrasive Particles shown by magnifying glass.*

*Guards against slipping on railroad car platforms and trapdoors.*

NEW ■ NEW ■ NEW ■ NEW ■ NEW ■ NEW ■ NEW ■ NEW ■ NEW ■ NEW ■ NEW

**A.W. ALGRIP** ABRASIVE ROLLED STEEL FLOOR PLATE

A Product of **ALAN WOOD STEEL COMPANY**

CONSCHOHOCKEN A-24, PA.

Gentlemen: *Please rush me complete information and a FREE copy of your 8 page A.W. ALGRIP BOOKLET.*

*Name*_____ *Title*_____

*Company*_____

*Street*_____

*City*_____ *State*_____

Other Products: PERMACLAD Stainless Clad Steel • A.W. SUPER-DIAMOND Floor Plate • Billets Plates • Sheets • Strip • (Alloy and Special Grades.)


## *ENGINEERING & SIGNALING*

**Carl O. Bird,** assistant engineer in the office of maintenance-of-way assistant to vice-president, NEW YORK CENTRAL SYSTEM, has been promoted to engineer of standards of the system, with headquarters as before at New York.

**C. K. Holden,** special engineer of the CANADIAN PACIFIC at Winnipeg, Man., has been appointed district engineer, Manitoba district, with the same headquarters.

## *SPECIAL*

**E. S. Thomas** has been appointed a safety director of the RAILWAY EXPRESS AGENCY, assigned to the Southern departments at Atlanta, Ga.

## *OBITUARY*

**J. Utley King,** assistant general purchasing agent of the ATLANTIC COAST LINE at Wilmington, N. C., died on September 24 at James Walker Memorial Hospital in that city, after a heart attack suffered at a ball game two days previously. He was born at Wilmington on June 30, 1887, and entered railroad service in 1903 as a mail boy in the purchasing department of the A.C.L. After serving successively as secretary to purchasing agent, assistant chief clerk in that department, chief clerk to purchasing agent, assistant general storekeeper, general storekeeper and assistant purchasing agent, he was appointed assistant general purchasing agent in September, 1948.

As reported in the *Railway Age* of August 19, **Herman F. Bohr,** president of the TENNESSEE, ALABAMA & GEORGIA at Chattanooga, Tenn., died on August 14, while testifying at a

**Herman F. Bohr**

hearing before the Public Service Commissions of Tennessee and Georgia. Mr. Bohr was born in Rockwood, Tenn., on March 28, 1884, and began his career as an office boy on June 1,

1900, with the Chattanooga Southern (now T.A.&G.). After serving in various other capacities, he was appointed general freight and passenger agent in 1907, later becoming general manager. In 1922 he was named vice-president and in 1945 was elected to the presidency.

**William J. Farrell,** executive vice-chairman of the Purchases and Stores Division of the ASSOCIATION OF AMERICAN RAILROADS at Washington, D. C., for the past 10 years, died suddenly at his home in that city on October 12, at the age of 61. Mr. Farrell, as active head of the P.&S. division of the A.A.R., was engaged at the time of his death in a survey of the steel requirements of the nation's railroads for 1951, for presentation to the National Production Authority, the Defense Transport Administration and other

**William J. Farrell**

government agencies dealing with steel allocations. Mr. Farrell was born at Wellesville, Ohio, on December 5, 1889. After attending high school and college, he became associated with the New York Central in July, 1907, as an assistant to the general storekeeper of the system. He remained with the N.Y.C. until 1919, when he became secretary of the Purchases and Stores division of the American Railway Association, predecessor organization of the A.A.R. He was appointed executive vice-chairman of the division on December 1, 1941.

**Robert E. Connolly,** who retired as vice-president in charge of accounting of the ILLINOIS CENTRAL, at Chicago, on August 31, died on October 12 in the Illinois Central Hospital, following a brief illness. A photograph of Mr. Connolly, and a biographical sketch of his railroad career, were published on page 66 of the *Railway Age* of August 26, in connection with his retirement as vice-president.

**Albert W. Newton,** former chief engineer of the CHICAGO, BURLINGTON & QUINCY, who was retired with the title of consulting engineer in February, 1937, died at St. Luke's Hospital, Chicago, on October 11.


Another
LEWIS-SHEPARD®
Industrial Truck

Save Money
Save Men
Save Time

ONE TON CAPACITY MODEL GC2-56

The "TOTEMASTER"

POWERED BY A 20 H.P., 4 CYLINDER GAS ENGINE

Indoors or out — this rugged ONE-TON Toter scoots around with loads up to capacity and at speeds up to 20 M.P.H.

- Crosley 4 cylinder engine — 20 HP, CI block — 5 main bearings.
- High compression engine — Ratio 7.8:1. More complete combustion means reduced fuel and less fumes.
- Electric starting. No cranking, therefore operator will stop engine while loading truck. Saves fuel and reduces fumes.
- 3 speeds forward — 1 reverse. Saves strain on engine. Increases grade performance with heavy loads. Lowers maintenance cost.
- Two wheel drive — differential. More effective traction. Less wear and tear.
- Water cooled engine — quiet and cooler.
- Hydraulic brakes — airplane type.
- Double handle grip provides one or two hand steering.
- When operator leaves seat, parking brake is mechanically applied.

MULTIPLY MANPOWER · LEWIS-SHEPARD

The "MASTER" Line®

21 Sq. Ft. of Loading Space . . . . Draw Bar Pull: 1200 lbs.
WRITE for "TOTEMASTER" Bulletin #30

DON'T DELAY
WRITE TODAY

LEWIS-SHEPARD
PRODUCTS INC.
WATERTOWN, MASS. CRAWFORDSVILLE, IND.
REPRESENTATIVES IN PRINCIPAL CITIES

LEWIS-SHEPARD PRODUCTS INC.
166 Walnut Street Watertown 72, Mass.
Please send me "TOTEMASTER" Bulletin #30

Name .....
Firm .....
Address .....
City..... Zone..... State.....

Mfrs. of The "MASTER" Line of Materials Handling Equipment

At
Hotel
Cleveland
you'll enjoy
friendly, attentive service...
delicious food...
quiet, sleep-inviting rooms...
a sincere and hearty welcome.
★
You'll be only a step
(through covered passage)
to Union Terminal trains
and garage, and convenient
to anywhere you'll want
to go in Cleveland.

*All rooms with radio—many with television. Singles from $4.50—doubles from $6.00.*

Hotel Cleveland
CLEVELAND, OHIO

## Current Publications

### PERIODICAL ARTICLES

*Are Trucks Destroying Our Highways?, by David G. Wittels. Saturday Evening Post, September 16, page 19 et seq. Published by the Curtis Publishing Company, Independence sq., Philadelphia, Pa. Single copies, 15 cents.*

*Highways in a Mess: No Answer in Sight. Business Week, September 16, pp. 90-94. Published by the McGraw-Hill Publishing Company, 330 W. 42nd st., New York 18. Single copies, 25 cents.*

The Saturday Evening Post article is a highly readable — and exceptionally illuminating — account of the techniques being regularly used by truck operators to increase their own profits by avoiding compliance with state laws regulating weight of motor vehicles. The Business Week article is a briefer account of what the success of those techniques is costing the people of the United States in the way of damaged highways or of increased costs of highway construction and maintenance. Each article emphasizes the opinion, widely held by state highway officials, that heavily loaded trucks are a major cause of highway damage, despite the contrary protestations of truck propagandists. Each article likewise demonstrates that violations of even the most liberal state weight laws are common; as the Post writer says, "some trucking firms whose executives most piously deplore such practices are among the worst offenders." And each article likewise points out that the truck operators possess great political power and have no qualms about using it. "The trucking industry," says Business Week, "can exert great political pressure." And Mr. Wittels quotes a trucking executive as having told a state road commissioner, "We don't care what the road commission thinks. We've got the legislature in our pocket." The two articles together cast serious doubt on the country's financial ability to maintain any sort of an adequate highway system so long as heavy truck operators persist in putting their own desire for large profits ahead of the national interest in good roads.

### BOOKS

*Legends of the Comstock Lode, by Lucius Beebe and Charles Clegg. 80 pages, photographs. Published by Grahame H. Hardy, 2046 E. 14th st., Oakland 6, Cal. $3.*

An anthology of material about Virginia City and the adjacent Nevada countryside during the silver bonanza years of the nineteenth century, one of the most fabulous eras in American history. The photographs —many, taken during the area's boom years, are contrasted with views of the same places as they appear today—are a pleasing and helpful adjunct to the sprightly text.

*Freight Train Handling Instructions. 71 pages. Published by the Air Brake Association, 80 E. Jackson blvd., Chicago 4. 50 cents.*

This is the second revision of a book first published in 1914. The first revision, made in 1928, was occasioned by the continuing increase in length and weight of freight trains, while the latest revision results from the advent of the Diesel locomotive and improved air-brake equipment on both cars and locomotives. The book is divided into four principal parts. The first part contains general information on damage, how to improve train handling, various things that affect braking, such as time, friction, lading, grade and curvature, and the effect of the various factors combined. Part 2 deals with freight-train brake equipment on cars and on locomotives. The third part is devoted to handling instructions, and the final part to train-crew instructions.

*High Green and the Bark Peelers, by R. M. Neal. 275 pages. Published by Duell, Sloan & Pearce, Inc., 270 Madison ave., New York 16. $3.50.*

Professor Neal is a railfan who finally got the chance he always wanted—to see the complete workings of a railroad, from top to bottom, engine cab to roundhouse, meeting the superintendents and enginemen and firemen, sitting up ahead in a big Diesel, chatting with the conductor of a country local, asking questions about new-fangled traffic control systems, checking statistics, hanging around freight yards, and generally having himself a wonderful time. He got his chance on the Boston & Maine, and this is the story of that road. According to the book jacket "It is the kind of a book that only an ardent and thoroughly well-informed railfan could have written; yet it is something more, it is the story of the development of transportation and how it changed the folkways of a part of America, and of the personalities involved in that development and that change."

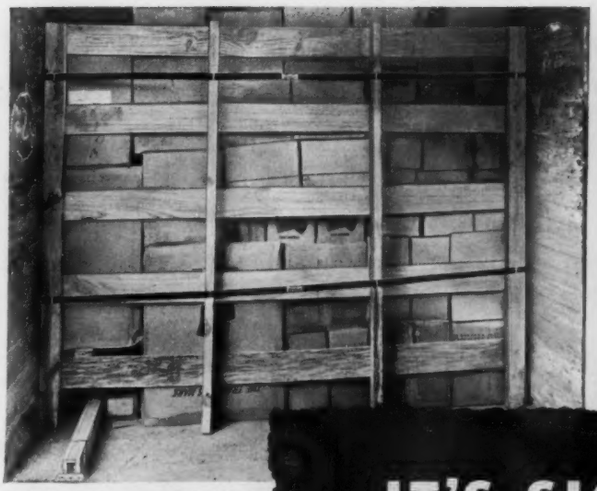
### PAMPHLETS

*Rules Regulating the Safe Loading of Bulk Grain in Closed Cars and Protection of Equipment. 32 pages. Published by the Freight Loading and Container Section, Association of American Railroads, 59 E. Van Buren st., Chicago 5. Free to interested shippers and shipper organizations.*

Revised, and with several important changes, this pamphlet contains 19 pages of line drawings and photographs showing the proper manner of applying and removing both wood and reinforced paper grain doors and the correct preparation of cars for grain loading. Among major changes from the previous issue of this pamphlet are inclusion of specifications for temporary wood grain doors and details of application of one-man steel strap reinforced paper grain doors. The pamphlet is designated as No. 36 in the series of closed car loading pamphlets issued by the Freight Loading and Container Section.

*100 Years of Locomotive Progress. Issued by the Public Relations department, Chicago, Milwaukee, St. Paul & Pacific, Room 356, Union Station, Chicago 6. Free.*

Milwaukee motive power, from the first wood burner to the latest steam, electric and Diesel-electric haulers is cross-sectioned in this well illustrated booklet which commemorates the road's first train operation just a century ago. Each of the photographs is accompanied by a brief description of the service career of the locomotive, together with pertinent mechanical data.



**Bulkheading,** reusable hardwood bulkheads and *Signode Steel Strapping* for separating and securing railroad LCL shipments.

**Bracing,** mixed car shipments using *Signode Wall Anchor Method* to hold the load securely.

# IT'S SIGNODE ON EVERY ROAD

## *for maximum protection of shipments in transit!*

**Floating Load Method.** Signode method of car bracing that eliminates floor fastenings, permitting load to shift with movement of car. Helps avoid damage from sudden impacts or starting and stopping.

**Controlled Floating Load Method.** By using Signode Composition Brakeman, or Signode Mechanical Brakeman, carloads are held snubbed to check longitudinal and lateral movement.

FOR all freight... in box cars, gondolas or on flat cars... lading of all types, in any type of container, bundle, or single unit... every major railroad uses Signode methods for carload bracing.

Maximum protection at lowest cost. American railroads and shippers have found that Signode methods of loading and bracing shipments result in maximum protection against damage in transit. In addition, these methods effect big savings in time and labor, freight costs, dunnage, and claim adjustments.

Four basic methods. *Carloading methods,* pictured here, include the hold fast cleat method for light commodities; wall anchor method for general LCL shipments; floating load method, and the *controlled* floating load. All methods use Signode heavy duty steel strapping, properly applied with Signode tools specially designed for the job.

If you have not yet discovered the many advantages of using Signode carloading methods, wire for full information to

**SIGNODE STEEL STRAPPING COMPANY**

**2637 N. Western Avenue, Chicago 47, Illinois**

SIGNODE

Offices coast to coast • *In Canada:* Canadian Steel Strapping Co., Ltd. • Foreign subsidiaries and distributors world-wide.

ERIE
ERIE
125

# *Winning LCL Back to the Rails*

## with the ERIE's "Flying Saucer" Service

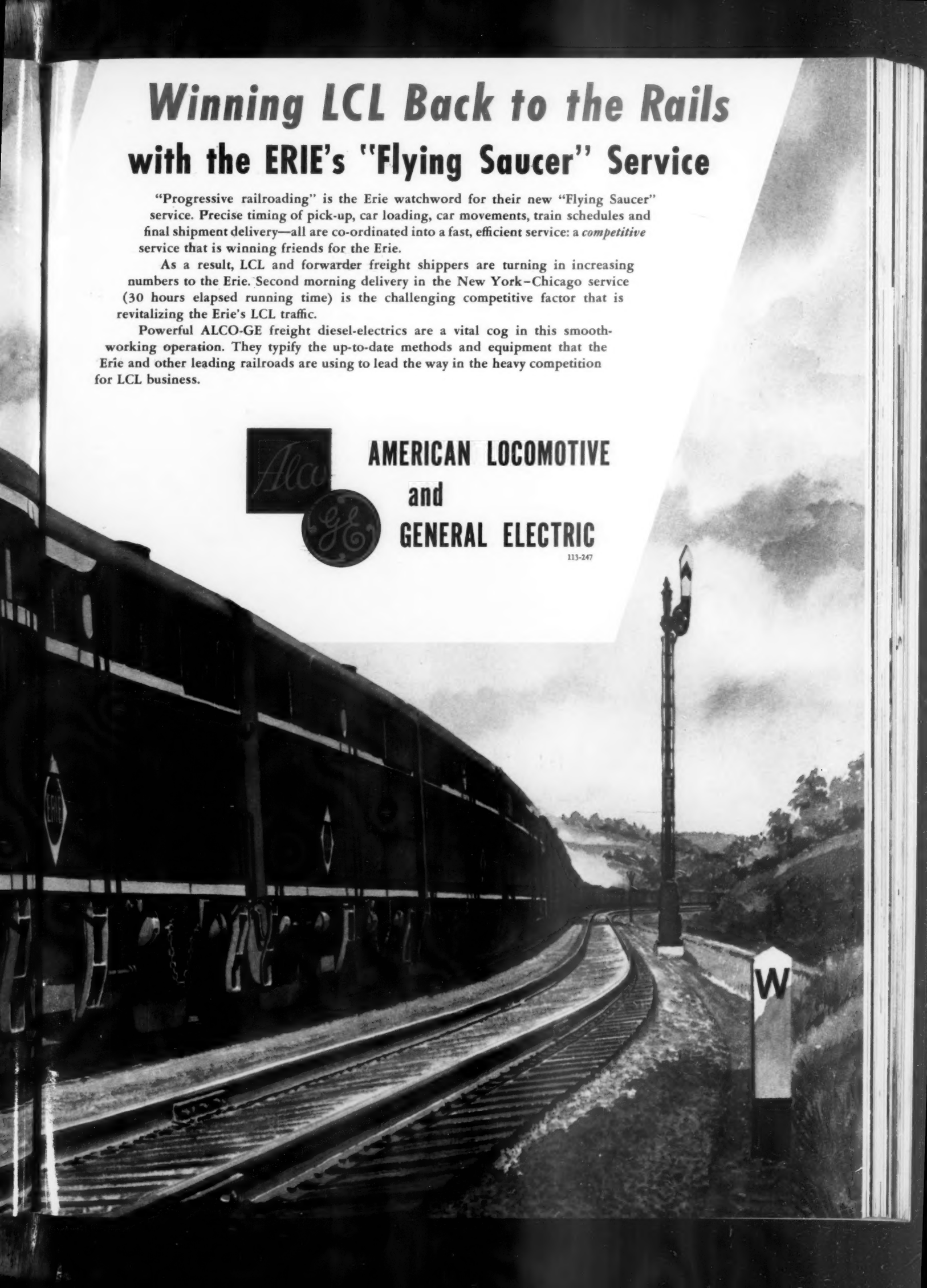
"Progressive railroading" is the Erie watchword for their new "Flying Saucer" service. Precise timing of pick-up, car loading, car movements, train schedules and final shipment delivery—all are co-ordinated into a fast, efficient service: a *competitive* service that is winning friends for the Erie.

As a result, LCL and forwarder freight shippers are turning in increasing numbers to the Erie. Second morning delivery in the New York–Chicago service (30 hours elapsed running time) is the challenging competitive factor that is revitalizing the Erie's LCL traffic.

Powerful ALCO-GE freight diesel-electrics are a vital cog in this smooth-working operation. They typify the up-to-date methods and equipment that the Erie and other leading railroads are using to lead the way in the heavy competition for LCL business.

**AMERICAN LOCOMOTIVE**
**and**
**GENERAL ELECTRIC**

113-247



# ON MET-L-WOOD USES

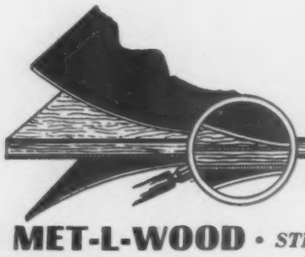
METAL BONDED TO PLYWOOD

MAJOR manufacturers of diesel locomotives use Met-L-Wood doors and exterior side panels for the same reasons, listed at right, that make Met-L-Wood the ideal construction material for many additional railroad uses. Interior panels, bulkheads, heading, wainscoting, doors, luggage shelves, cabinets, table tops, baggage-car messenger accommodation units...All gain beauty, strength and utility when they are made lighter with Met-L-Wood.

Met-L-Wood versatility extends to the materials from which it is made. A large variety of woods, metals, thicknesses and finishes are available in stock sizes and units; or prefabricated to most exacting specifications. Write for 12-page Bulletin, describing Met-L-Wood possibilities fully.

**These are the Advantages of MET-L-WOOD for Railroad Uses**

- **WEIGHT SAVINGS** with Met-L-Wood are as high as 73% over steel construction of equal strength!
- **STIFFNESS** of Met-L-Wood Type 2P2-3/8" thickness is the same as that of solid steel plate 1/4" thick!
- **INSULATION and SOUND-DEADENING** qualities of Met-L-Wood cut costs and deadweight still further by making less insulation material necessary.
- **INHERENT BEAUTY** of Met-L-Wood's smooth, tough surfaces adds aesthetic value to rugged durability.
- **FAST ASSEMBLY** of prefabricated Met-L-Wood doors and panels cuts manufacturing costs without sacrificing quality. Standard Met-L-Wood sections can be formed, sawed, tapped, drilled, brazed or soldered without special tools or skills.



**MET-L-WOOD CORPORATION**

6755 West 65th Street, Chicago 38, Illinois

**MET-L-WOOD** • *STRONG...LIGHT...Smooth Finish...Sound Deadening...Fire-Resisting...Insulating*

# REVENUES AND EXPENSES OF RAILWAYS

MONTH OF AUGUST AND EIGHT MONTHS OF CALENDAR YEAR 1950

| Name of road | | Av. mileage operated during period | Operating revenues | | | Operating Expenses | | | | | Operating ratio | Net from railway operation | Railway tax accruals | Net railway operating income | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Maintenance of | | | | | | | | | |
| | | | Freight | Passenger | Total (inc. misc.) | Way and structures | Equipment | Traffic | Transportation | Total | | | | 1950 | 1949 |
| Akron, Canton & Youngstown | August | 171 | 447,818 | 58 | 463,637 | 66,833 | 48,176 | 30,814 | 129,764 | 298,103 | 64.3 | 165,534 | 70,469 | 79,642 | 21,862 |
| | 8 mos. | 171 | 3,153,105 | 587 | 3,253,718 | 492,516 | 331,528 | 234,752 | 970,027 | 2,198,635 | 67.6 | 1,055,083 | 419,768 | 569,252 | 354,542 |
| Atchison, Topeka & Santa Fe System | August | 13,073 | 41,652,761 | 4,841,592 | 50,405,373 | 6,933,700 | 8,107,801 | 939,345 | 14,317,301 | 32,198,490 | 63.88 | 18,206,883 | 9,220,036 | 9,169,932 | 3,634,109 |
| | 8 mos. | 13,073 | 262,022,849 | 28,997,812 | 318,211,044 | 47,246,845 | 57,097,566 | 7,738,393 | 100,950,911 | 226,623,067 | 71.22 | 91,587,977 | 48,036,392 | 43,269,973 | 33,113,803 |
| Atlanta & St. Andrews Bay | August | 82 | 251,703 | 1,805 | 260,143 | 34,881 | 16,688 | 7,226 | 54,423 | 125,511 | 48.2 | 134,632 | 53,982 | 57,801 | 35,735 |
| | 8 mos. | 82 | 1,886,688 | 10,648 | 1,948,106 | 259,823 | 146,676 | 57,374 | 419,454 | 982,754 | 50.4 | 965,352 | 381,705 | 405,229 | 167,831 |
| Atlanta & West Point | August | 93 | 303,447 | 43,911 | 385,219 | 35,047 | 47,799 | 14,444 | 158,866 | 279,337 | 72.5 | 105,882 | 45,772 | 39,876 | 12,814 |
| | 8 mos. | 93 | 2,063,715 | 338,018 | 2,700,994 | 295,446 | 387,693 | 110,262 | 1,247,147 | 2,216,755 | 82.1 | 484,239 | 241,834 | 83,079 | 5,183 |
| Western of Alabama | August | 133 | 299,443 | 41,163 | 366,786 | 37,798 | 53,614 | 14,330 | 139,228 | 266,613 | 72.7 | 100,173 | 50,892 | 48,748 | 38,645 |
| | 8 mos. | 133 | 2,099,083 | 327,658 | 2,653,889 | 357,185 | 440,382 | 112,600 | 1,106,201 | 2,180,805 | 82.2 | 473,084 | 279,059 | 179,467 | 159,259 |
| Atlantic & Danville | August | 205 | 120,928 | ..... | 122,911 | 24,000 | 8,022 | 8,403 | 37,716 | 89,246 | 72.6 | 33,665 | 7,722 | 10,368 | —25,836 |
| | 8 mos. | 205 | 878,072 | ..... | 892,153 | 191,924 | 63,562 | 61,955 | 285,692 | 684,212 | 76.7 | 207,941 | 56,864 | 44,945 | —25,836 |
| Atlantic Coast Line | August | 5,499 | 8,415,213 | 1,245,385 | 10,353,496 | 2,135,861 | 1,917,411 | 270,515 | 3,987,378 | 8,809,845 | 85.1 | 1,543,651 | 1,250,000 | 419,812 | 113,740 |
| | 8 mos. | 5,513 | 68,228,353 | 11,520,296 | 86,213,259 | 15,617,278 | 14,575,032 | 2,315,049 | 33,608,207 | 70,231,314 | 81.5 | 15,981,945 | 8,800,000 | 5,985,606 | 4,122,596 |
| Charleston & Western Carolina | August | 343 | 391,340 | 2,095 | 403,365 | 80,624 | 62,709 | 15,337 | 154,188 | 324,423 | 80.4 | 78,942 | 45,000 | 38,037 | 20,805 |
| | 8 mos. | 343 | 3,164,633 | 16,855 | 3,251,588 | 610,389 | 472,192 | 122,453 | 1,261,107 | 2,549,932 | 78.4 | 701,656 | 320,000 | 336,097 | 14,134 |
| Baltimore & Ohio | August | 6,201 | 34,017,566 | 2,035,699 | 38,237,438 | 5,559,737 | 7,918,940 | 816,878 | 14,138,761 | 29,725,339 | 77.7 | 8,512,099 | 4,027,576 | 3,795,932 | 2,408,136 |
| | 8 mos. | 6,201 | 227,531,504 | 14,290,399 | 255,945,719 | 32,481,340 | 54,015,003 | 6,203,533 | 103,916,362 | 206,996,590 | 80.9 | 48,949,129 | 21,255,504 | 22,824,636 | 21,820,019 |
| Staten Island Rapid Transit | August | 29 | 199,212 | 51,036 | 253,422 | 50,499 | 37,257 | 1,415 | 134,110 | 246,806 | 97.4 | 6,616 | 33,560 | —40,773 | —51,280 |
| | 8 mos. | 29 | 1,423,553 | 392,801 | 1,844,730 | 339,226 | 299,494 | 12,185 | 1,002,502 | 1,832,376 | 99.3 | 12,354 | 262,860 | —362,773 | —394,603 |
| Bangor & Aroostook | August | 602 | 627,913 | 35,596 | 691,602 | 182,167 | 152,453 | 13,294 | 202,425 | 600,121 | 86.8 | 91,481 | 150,718 | —5,476 | —110,637 |
| | 8 mos. | 602 | 8,267,040 | 241,674 | 8,783,569 | 1,454,739 | 1,333,750 | 107,819 | 2,108,584 | 5,393,423 | 61.4 | 3,390,146 | 1,533,982 | 1,727,715 | 1,732,796 |
| Bessemer & Lake Erie | August | 212 | 2,947,593 | 1,613 | 2,971,451 | 218,956 | 1,169,257 | 17,021 | 525,060 | 2,017,759 | 67.9 | 953,692 | 529,513 | 650,067 | 615,690 |
| | 8 mos. | 212 | 15,171,291 | 7,736 | 15,332,715 | 1,398,054 | 5,385,943 | 127,788 | 3,356,226 | 10,964,078 | 71.5 | 4,368,637 | 2,845,493 | 3,266,337 | 3,733,801 |
| Boston & Maine | August | 1,711 | 6,186,588 | 1,162,338 | 8,060,898 | 1,240,975 | 1,045,809 | 98,969 | 2,988,757 | 5,677,829 | 70.4 | 2,383,069 | 1,070,856 | 926,348 | 430,927 |
| | 8 mos. | 1,712 | 42,657,078 | 7,769,527 | 55,355,408 | 9,217,597 | 8,216,339 | 845,947 | 23,148,267 | 43,825,585 | 79.2 | 11,529,823 | 5,111,880 | 3,570,560 | 3,220,397 |
| Cambria & Indiana | August | 38 | 154,365 | ..... | 154,577 | 15,748 | 48,144 | 303 | 27,362 | 111,796 | 72.3 | 42,781 | 75,576 | 108,861 | 35,526 |
| | 8 mos. | 35 | 922,872 | ..... | 923,368 | 112,822 | 596,126 | 6,196 | 173,295 | 1,003,541 | 108.7 | —80,173 | 385,102 | 398,577 | 409,070 |
| Canadian Pacific Lines in Maine | August | 234 | 180,880 | 26,514 | 230,333 | 129,626 | 33,145 | 7,179 | 104,812 | 285,240 | 123.8 | —54,907 | 23,131 | —107,985 | —137,008 |
| | 8 mos. | 234 | 3,045,298 | 291,842 | 3,526,071 | 793,464 | 540,563 | 51,906 | 1,425,445 | 2,900,447 | 82.3 | 625,624 | 198,134 | —59,047 | 51,955 |
| Canadian Pacific Lines in Vermont | August | 90 | 159,302 | 18,994 | 194,061 | 161,324 | 17,838 | 5,973 | 95,525 | 287,086 | 147.9 | —93,025 | 11,787 | —159,941 | —135,875 |
| | 8 mos. | 90 | 1,230,310 | 101,075 | 1,461,865 | 561,147 | 186,385 | 42,269 | 836,987 | 1,680,050 | 114.9 | —218,185 | 96,124 | —719,974 | —943,277 |
| Central of Georgia | August | 1,815 | 2,932,770 | 257,959 | 3,415,725 | 595,577 | 590,391 | 106,334 | 1,469,924 | 2,927,933 | 85.7 | 487,792 | 216,671 | 287,855 | 35,462 |
| | 8 mos. | 1,815 | 21,144,257 | 1,715,438 | 24,692,875 | 4,216,022 | 4,142,866 | 887,959 | 11,310,148 | 21,915,001 | 88.8 | 2,777,874 | 1,735,558 | 712,132 | 129,503 |
| Central of New Jersey | August | 410 | 3,065,679 | 552,267 | 3,872,908 | 551,012 | 587,180 | 56,900 | 1,684,674 | 3,024,769 | 78.1 | 848,139 | 382,946 | 98,447 | —316,693 |
| | 8 mos. | 410 | 20,028,954 | 3,937,894 | 25,488,506 | 3,740,525 | 4,227,174 | 427,305 | 12,729,764 | 22,368,487 | 87.8 | 3,120,019 | 2,960,252 | —2,448,147 | —3,241,464 |
| Central of Pennsylvania | August | 212 | 1,836,550 | 9,398 | 1,889,560 | 271,189 | 330,817 | 24,148 | 506,225 | 1,171,072 | 62.0 | 718,488 | 82,312 | 892,560 | 690,902 |
| | 8 mos. | 212 | 12,377,537 | 73,631 | 12,717,268 | 1,270,551 | 2,599,666 | 188,905 | 3,665,082 | 8,036,738 | 63.2 | 4,680,530 | 542,220 | 6,412,924 | 5,655,072 |
| Central Vermont | August | 422 | 738,000 | 80,000 | 882,000 | 185,767 | 84,704 | 15,000 | 363,822 | 686,572 | 77.8 | 195,428 | 49,476 | 95,578 | 83,074 |
| | 8 mos. | 421 | 5,943,000 | 455,000 | 6,842,000 | 1,225,440 | 1,115,963 | 122,427 | 2,840,774 | 5,592,167 | 81.7 | 1,249,833 | 363,654 | 427,941 | 180,581 |
| Chesapeake & Ohio | August | 5,119 | 29,054,070 | 879,737 | 31,368,363 | 4,033,827 | 4,809,014 | 516,034 | 9,157,512 | 19,600,889 | 62.5 | 11,767,474 | 6,355,956 | 5,796,315 | 1,888,344 |
| | 8 mos. | 5,118 | 188,951,953 | 5,104,134 | 201,889,971 | 28,494,083 | 37,952,101 | 3,992,507 | 65,580,742 | 144,209,111 | 71.4 | 57,680,860 | 29,458,861 | 30,346,312 | 24,147,847 |
| Chicago & Eastern Illinois | August | 886 | 2,238,629 | 280,017 | 2,786,085 | 325,901 | 360,409 | 94,943 | 967,488 | 1,874,608 | 67.3 | 911,477 | 263,900 | 518,367 | 186,251 |
| | 8 mos. | 894 | 15,032,858 | 1,846,513 | 18,728,252 | 2,360,590 | 2,746,201 | 758,188 | 7,442,727 | 14,304,504 | 76.4 | 4,423,748 | 1,189,400 | 2,097,273 | 573,161 |
| Chicago & Illinois Midland | August | 130 | 1,046,052 | 304 | 1,064,808 | 93,727 | 133,332 | 22,887 | 221,898 | 507,129 | 47.6 | 557,679 | 228,818 | 306,496 | 84,205 |
| | 8 mos. | 130 | 6,475,744 | 2,329 | 6,590,218 | 675,908 | 976,838 | 192,546 | 1,627,998 | 3,758,777 | 57.0 | 2,831,441 | 1,175,037 | 1,553,577 | 926,308 |
| Chicago & North Western | August | 7,977 | 14,651,821 | 2,175,116 | 18,568,497 | 2,706,800 | 2,995,441 | 330,723 | 7,540,440 | 14,345,077 | 77.2 | 4,223,420 | 1,090,901 | 2,609,191 | 2,254,790 |
| | 8 mos. | 8,026 | 92,213,607 | 13,758,568 | 118,081,564 | 19,437,732 | 22,810,878 | 2,496,846 | 54,174,059 | 104,721,641 | 88.7 | 13,359,923 | 8,368,915 | 2,145,118 | —2,080,743 |
| Chicago, Burlington & Quincy | August | 8,830 | 19,474,035 | 1,891,379 | 23,342,867 | 3,561,899 | 3,121,048 | 396,530 | 7,026,995 | 14,843,567 | 63.6 | 8,499,300 | 4,179,438 | 3,938,793 | 1,741,664 |
| | 8 mos. | 8,849 | 120,372,317 | 11,464,052 | 145,210,815 | 22,499,595 | 23,232,305 | 3,299,098 | 51,559,605 | 106,098,277 | 73.1 | 39,112,538 | 19,012,621 | 17,099,047 | 8,745,930 |
| Chicago Great Western | August | 1,476 | 3,061,466 | 35,589 | 3,265,005 | 866,445 | 298,968 | 96,520 | 900,000 | 2,236,296 | 68.5 | 1,028,709 | 284,411 | 431,624 | 171,143 |
| | 8 mos. | 1,478 | 19,483,632 | 135,404 | 20,746,497 | 4,527,729 | 2,365,924 | 766,784 | 6,552,597 | 14,776,096 | 71.2 | 5,970,401 | 1,806,208 | 2,236,552 | 1,528,525 |
| Chicago, Indianapolis & Louisville | August | 541 | 1,566,954 | 79,789 | 1,740,398 | 290,127 | 218,137 | 76,800 | 608,741 | 1,276,155 | 73.3 | 464,243 | 180,548 | 185,781 | 90,971 |
| | 8 mos. | 541 | 11,232,359 | 632,445 | 12,581,925 | 2,270,035 | 1,831,685 | 603,854 | 4,370,599 | 9,763,375 | 77.6 | 2,818,550 | 971,634 | 1,114,660 | 477,787 |
| Chicago, Milwaukee, St. Paul & Pacific | August | 10,671 | 21,606,968 | 1,872,037 | 25,720,152 | 3,650,671 | 3,940,154 | 414,181 | 9,161,338 | 18,092,382 | 70.3 | 7,627,770 | 3,593,000 | 3,441,335 | 2,891,066 |
| | 8 mos. | 10,671 | 131,517,716 | 11,381,686 | 157,766,716 | 23,064,778 | 29,790,829 | 3,378,018 | 68,113,669 | 131,391,411 | 83.3 | 26,375,305 | 14,122,000 | 8,775,307 | 4,973,941 |
| Chicago, Rock Island & Pacific | August | 7,601 | 14,109,436 | 2,068,514 | 17,461,311 | 2,557,605 | 2,599,259 | 445,123 | 5,816,051 | 12,124,707 | 69.4 | 5,336,604 | 2,478,152 | 2,152,265 | 1,687,143 |
| | 8 mos. | 7,614 | 93,218,121 | 11,388,260 | 113,120,612 | 14,767,368 | 18,702,332 | 3,497,124 | 42,119,364 | 84,460,777 | 74.7 | 28,659,835 | 12,657,367 | 10,610,260 | 12,080,341 |
| Chicago, St. Paul, Minn. & Omaha | August | 1,617 | 3,036,725 | 218,198 | 3,479,491 | 504,003 | 411,685 | 61,356 | 1,443,633 | 2,539,941 | 73.0 | 939,550 | 199,651 | 493,647 | 584,038 |
| | 8 mos. | 1,617 | 17,668,150 | 1,388,209 | 20,603,131 | 3,247,082 | 2,938,086 | 449,651 | 10,310,450 | 17,862,370 | 86.7 | 2,740,761 | 1,430,985 | 78,262 | —455,345 |
| Clinchfield | August | 317 | 1,845,975 | 2,451 | 1,860,737 | 199,936 | 333,302 | 34,518 | 387,392 | 985,021 | 52.9 | 875,715 | 194,776 | 841,529 | 318,851 |
| | 8 mos. | 317 | 13,123,319 | 16,280 | 13,214,853 | 1,795,043 | 2,364,914 | 269,338 | 3,044,248 | 7,710,289 | 58.3 | 5,504,564 | 1,334,588 | 5,086,989 | 3,094,178 |

(Continued on page 74)

# REVENUES AND EXPENSES OF RAILWAYS

MONTH OF AUGUST AND EIGHT MONTHS OF CALENDAR YEAR 1950

| Name of road | | Av. mileage operated during period | Operating revenues | | | Operating Expenses | | | | | Operating ratio | Net from railway operation | Railway tax accruals | Net railway operating income | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Maintenance of | | | | | | | | | |
| | | | Freight | Passenger | Total (inc. misc.) | Way and structures | Equipment | Traffic | Transportation | Total | | | | 1950 | 1949 |
| Colorado & Southern | August | 740 | 1,211,766 | 98,144 | 1,413,067 | 224,656 | 180,893 | 25,587 | 438,249 | 921,435 | 65.2 | 491,632 | 228,839 | 184,373 | 128,418 |
| | 8 mos. | 742 | 7,369,851 | 549,727 | 8,588,610 | 1,324,343 | 1,289,372 | 199,672 | 3,068,274 | 6,275,904 | 73.1 | 2,312,706 | 1,195,379 | 692,623 | 549,742 |
| Ft. Worth & Denver City | August | 1,130 | 1,382,426 | 166,768 | 1,700,851 | 249,850 | 235,795 | 46,755 | 629,630 | 1,248,566 | 73.4 | 452,285 | 137,480 | 169,867 | 121,185 |
| | 8 mos. | 987 | 10,348,476 | 944,814 | 12,171,023 | 1,725,554 | 1,571,004 | 384,726 | 4,034,729 | 8,317,108 | 68.3 | 3,853,915 | 1,325,320 | 1,736,344 | 1,332,551 |
| Colorado & Wyoming | August | 41 | 145,035 | ..... | 232,759 | 27,785 | 19,246 | 1,068 | 85,390 | 143,832 | 61.7 | 88,927 | 47,414 | 41,034 | 32,903 |
| | 8 mos. | 41 | 882,527 | ..... | 1,492,774 | 122,717 | 160,820 | 6,941 | 609,838 | 976,165 | 65.3 | 516,609 | 298,182 | 216,267 | 312,815 |
| Columbus & Greenville | August | 168 | 137,688 | —10 | 145,326 | 65,908 | 51,435 | 4,695 | 51,463 | 190,977 | 131.4 | —45,651 | 9,970 | —53,894 | 11,356 |
| | 8 mos. | 168 | 1,191,773 | —193 | 1,240,821 | 324,221 | 254,632 | 37,897 | 395,617 | 1,150,901 | 92.8 | 89,920 | 122,911 | —13,537 | 84,921 |
| Delaware & Hudson | August | 793 | 4,905,034 | 233,291 | 5,284,853 | 716,715 | 1,011,502 | 73,340 | 1,799,385 | 3,773,931 | 71.4 | 1,510,922 | 831,302 | 694,391 | 143,148 |
| | 8 mos. | 794 | 32,808,168 | 1,281,268 | 35,023,297 | 4,648,546 | 7,622,505 | 576,436 | 13,863,733 | 28,088,070 | 80.2 | 6,935,227 | 3,757,732 | 3,292,645 | 2,136,222 |
| Delaware, Lackawanna & Western | August | 966 | 6,023,313 | 837,478 | 7,462,782 | 828,705 | 1,278,131 | 148,980 | 3,155,820 | 5,647,686 | 75.7 | 1,815,096 | 904,049 | 904,939 | 456,047 |
| | 8 mos. | 967 | 41,308,964 | 6,483,483 | 51,974,630 | 6,316,685 | 9,086,498 | 1,235,236 | 23,294,161 | 41,818,860 | 80.5 | 10,155,770 | 5,236,848 | 4,872,056 | 4,056,648 |
| Denver & Rio Grande Western | August | 2,413 | 6,698,527 | 464,248 | 7,413,544 | 789,876 | 1,146,224 | 146,056 | 2,253,955 | 4,613,306 | 62.2 | 2,800,238 | 1,387,161 | 1,390,830 | 901,307 |
| | 8 mos. | 2,413 | 35,368,292 | 1,980,334 | 38,936,391 | 5,192,677 | 7,698,013 | 1,160,641 | 14,168,088 | 30,166,028 | 77.5 | 8,770,363 | 4,489,592 | 4,543,999 | 5,270,882 |
| Detroit & Mackinac | August | 232 | 238,984 | 800 | 248,521 | 35,000 | 18,334 | 1,612 | 38,968 | 100,312 | 40.4 | 148,209 | 64,912 | 75,374 | 35,526 |
| | 8 mos. | 232 | 1,289,068 | 5,378 | 1,356,513 | 245,000 | 153,364 | 13,816 | 257,299 | 729,375 | 53.8 | 627,138 | 259,348 | 355,950 | 232,337 |
| Detroit & Toledo Shore Line | August | 50 | 658,741 | ..... | 661,015 | 68,418 | 53,830 | 17,284 | 190,098 | 340,437 | 51.5 | 320,578 | 108,210 | 107,388 | 39,156 |
| | 8 mos. | 50 | 4,887,313 | ..... | 4,907,326 | 515,622 | 405,211 | 109,835 | 1,486,735 | 2,610,777 | 53.2 | —296,549 | 719,599 | 778,239 | 630,882 |
| Detroit, Toledo & Ironton | August | 464 | 1,528,276 | 569 | 1,583,959 | 191,684 | 236,034 | 24,929 | 405,578 | 896,944 | 56.6 | 687,015 | 292,287 | 339,253 | 219,981 |
| | 8 mos. | 464 | 11,522,710 | 3,126 | 11,872,281 | 1,260,868 | 1,908,009 | 194,255 | 3,151,475 | 6,811,256 | 57.4 | 5,061,025 | 2,074,240 | 2,429,197 | 1,967,955 |
| Duluth, Missabe & Iron Range | August | 563 | 5,955,442 | 2,696 | 6,981,749 | 612,669 | 544,747 | 7,622 | 1,706,091 | 2,938,001 | 42.1 | 4,043,748 | 1,874,405 | 2,117,855 | 1,833,729 |
| | 8 mos. | 563 | 23,765,806 | 14,606 | 27,893,959 | 4,399,881 | 4,295,162 | 62,518 | 7,973,209 | 17,272,194 | 61.9 | 10,621,765 | 5,412,564 | 5,045,217 | 7,075,918 |
| Duluth, South Shore & Atlantic | August | 539 | 617,415 | 10,647 | 667,114 | 142,351 | 94,270 | 21,127 | 259,603 | 534,619 | 80.1 | 132,495 | 28,681 | 62,638 | —65,288 |
| | 8 mos. | 539 | 4,163,411 | 59,288 | 4,463,655 | 921,459 | 792,088 | 150,665 | 1,661,737 | 3,657,369 | 81.9 | 806,286 | 201,536 | 410,783 | —209,433 |
| Duluth, Winnipeg & Pacific | August | 175 | 384,000 | 2,200 | 393,700 | 78,411 | 44,703 | 4,071 | 147,961 | 282,716 | 71.8 | 110,984 | 30,786 | 44,882 | —54,795 |
| | 8 mos. | 175 | 2,752,000 | 12,200 | 2,804,700 | 506,656 | 360,134 | 33,005 | 1,198,147 | 2,148,361 | 76.6 | 656,339 | 220,895 | 79,593 | —279,331 |
| Elgin, Joliet & Eastern | August | 238 | 3,221,108 | 3 | 3,835,534 | 427,199 | 482,610 | 25,503 | 1,183,445 | 2,247,991 | 58.6 | 1,587,543 | 616,825 | 663,595 | 221,403 |
| | 8 mos. | 238 | 26,079,782 | 18 | 31,571,613 | 2,285,949 | 4,067,594 | 211,771 | 10,038,837 | 17,511,853 | 55.5 | 14,059,760 | 5,426,266 | 6,029,178 | 4,695,159 |
| Erie | August | 2,231 | 13,591,623 | 691,552 | 15,358,253 | 1,999,321 | 2,210,816 | 314,764 | 6,012,954 | 11,157,457 | 72.6 | 4,200,796 | 1,811,646 | 1,787,299 | 563,276 |
| | 8 mos. | 2,231 | 93,775,219 | 4,768,399 | 105,239,118 | 12,884,091 | 16,158,019 | 2,492,646 | 42,970,019 | 79,165,489 | 75.2 | 26,073,629 | 11,409,808 | 11,549,068 | 5,917,434 |
| Florida East Coast | August | 571 | 1,281,625 | 379,463 | 1,816,959 | 512,538 | 435,157 | 62,057 | 666,092 | 1,833,746 | 100.9 | —16,787 | 149,218 | —227,352 | —496,797 |
| | 8 mos. | 571 | 12,487,854 | 4,688,230 | 18,757,555 | 3,392,414 | 3,103,778 | 502,692 | 6,550,424 | 14,900,157 | 79.4 | 3,857,398 | 1,214,191 | 1,626,497 | 203,433 |
| Georgia Railroad | August | 326 | 706,593 | 52,424 | 801,906 | 89,948 | 110,479 | 28,535 | 301,753 | 564,505 | 70.4 | 237,401 | 34,936 | 217,540 | 96,956 |
| | 8 mos. | 326 | 4,846,459 | 224,559 | 5,413,426 | 730,658 | 834,776 | 214,587 | 2,355,026 | 4,392,908 | 81.2 | 1,020,518 | 270,830 | 904,637 | 532,649 |
| Georgia & Florida | August | 408 | 326,919 | 35 | 329,749 | 71,154 | 29,939 | 17,188 | 107,743 | 242,426 | 73.5 | 87,323 | 16,376 | 50,032 | 44,848 |
| | 8 mos. | 408 | 1,912,288 | 53 | 1,935,565 | 497,415 | 257,720 | 121,750 | 790,779 | 1,764,899 | 91.2 | 170,666 | 126,670 | —74,998 | —222,342 |
| Grand Trunk Western | August | 971 | 4,432,000 | 240,000 | 4,969,000 | 824,098 | 831,841 | 64,176 | 2,037,661 | 3,913,423 | 78.8 | 1,055,577 | 165,280 | 650,888 | 437,043 |
| | 8 mos. | 971 | 32,742,000 | 1,463,000 | 36,465,000 | 5,251,995 | 6,048,972 | 522,604 | 15,207,762 | 28,246,150 | 77.5 | 8,218,850 | 1,735,780 | 4,772,218 | 2,278,472 |
| Canadian Natl. Lines in New Eng. | August | 172 | 135,000 | 17,000 | 194,000 | 77,258 | 41,802 | 2,623 | 125,483 | 269,054 | 138.7 | —75,054 | 22,478 | —134,648 | —115,216 |
| | 8 mos. | 172 | 1,216,000 | 63,800 | 1,532,000 | 500,619 | 349,567 | 21,786 | 958,042 | 1,930,616 | 126.0 | —398,616 | 179,824 | —870,815 | —1,016,082 |
| Great Northern | August | 8,316 | 20,297,776 | 1,030,504 | 23,092,521 | 3,339,078 | 3,240,748 | 306,290 | 6,636,041 | 14,229,995 | 61.6 | 8,862,526 | 2,039,175 | 6,632,474 | 3,607,372 |
| | 8 mos. | 8,316 | 108,231,023 | 6,894,130 | 125,199,993 | 25,836,799 | 24,526,907 | 2,596,171 | 47,687,677 | 105,729,752 | 84.4 | 19,470,241 | 12,290,136 | 5,311,025 | 10,531,726 |
| Green Bay & Western | August | 224 | 361,021 | —13 | 369,888 | 10,159 | 79,915 | 19,671 | 79,122 | 200,740 | 54.3 | 169,148 | 71,950 | 76,642 | 7,502 |
| | 8 mos. | 224 | 2,436,019 | —13 | 2,488,475 | 464,468 | 315,027 | 152,459 | 629,493 | 1,665,098 | 66.9 | 823,377 | 332,240 | 367,145 | 53,530 |
| Gulf, Mobile & Ohio | August | 2,898 | 6,106,209 | 512,407 | 7,044,747 | 1,072,556 | 1,239,594 | 226,432 | 2,064,326 | 4,902,119 | 69.6 | 2,142,628 | 923,177 | 953,824 | 587,712 |
| | 8 mos. | 2,898 | 42,026,902 | 3,189,879 | 48,580,379 | 7,813,935 | 9,059,831 | 1,797,927 | 15,380,106 | 36,413,431 | 75.0 | 12,166,948 | 5,023,780 | 4,996,022 | 4,580,030 |
| Illinois Central | August | 6,543 | 20,002,615 | 2,057,335 | 24,320,487 | 4,228,505 | 4,077,137 | 444,418 | 8,274,796 | 17,934,308 | 73.7 | 6,386,179 | 3,605,671 | 2,851,013 | 1,828,447 |
| | 8 mos. | 6,543 | 141,242,287 | 13,754,003 | 171,713,532 | 27,864,403 | 29,938,671 | 3,488,647 | 62,804,634 | 131,354,481 | 76.5 | 40,359,051 | 21,419,177 | 17,441,532 | 14,876,677 |
| Illinois Terminal | August | 462 | 951,750 | 90,621 | 1,180,393 | 148,829 | 135,440 | 34,061 | 408,835 | 778,066 | 65.9 | 402,327 | 199,328 | 177,677 | 126,383 |
| | 8 mos. | 463 | 6,161,963 | 730,103 | 7,765,965 | 1,131,095 | 1,042,183 | 287,732 | 3,107,639 | 5,944,225 | 76.5 | 1,821,740 | 901,883 | 765,633 | 817,288 |
| Kansas City Southern | August | 891 | 2,968,554 | 125,086 | 3,361,440 | 390,055 | 396,672 | 84,846 | 948,948 | 1,929,636 | 57.4 | 1,431,804 | 595,000 | 643,937 | 764,080 |
| | 8 mos. | 891 | 22,198,802 | 804,834 | 24,972,793 | 2,313,841 | 3,131,154 | 715,052 | 7,404,321 | 14,437,824 | 57.8 | 10,534,969 | 3,844,000 | 5,246,636 | 5,999,457 |
| Kansas, Oklahoma & Gulf | August | 327 | 497,181 | 704 | 501,530 | 57,784 | 40,871 | 17,253 | 112,533 | 248,031 | 49.5 | 253,499 | 108,370 | 115,177 | 51,397 |
| | 8 mos. | 327 | 3,426,286 | 4,916 | 3,459,867 | 396,264 | 300,931 | 135,685 | 887,768 | 1,870,170 | 54.1 | 1,589,697 | 705,582 | 676,823 | 653,332 |
| Lake Superior & Ishpeming | August | 156 | 302,024 | 47 | 383,778 | 51,705 | 42,859 | 1,658 | 91,508 | 196,727 | 51.3 | 187,051 | 98,026 | 95,435 | 98,095 |
| | 8 mos. | 156 | 1,821,500 | 295 | 2,233,034 | 367,430 | 362,624 | 14,323 | 582,334 | 1,409,547 | 63.1 | 823,457 | 507,541 | 363,418 | 642,374 |
| Lehigh & Hudson River | August | 96 | 291,932 | ..... | 292,645 | 38,810 | 23,639 | 9,182 | 97,801 | 177,309 | 60.6 | 115,336 | 56,143 | 36,425 | 6,941 |
| | 8 mos. | 96 | 1,937,132 | ..... | 1,941,095 | 282,120 | 197,258 | 71,581 | 733,208 | 1,353,449 | 69.7 | 587,646 | 241,501 | 176,293 | 74,562 |
| Lehigh & New England | August | 191 | 887,587 | ..... | 894,933 | 72,468 | 113,239 | 11,944 | 180,437 | 407,131 | 45.5 | 487,802 | 217,154 | 302,753 | 211,545 |
| | 8 mos. | 191 | 5,228,589 | ..... | 5,268,253 | 621,805 | 878,749 | 94,749 | 1,288,471 | 3,126,670 | 59.3 | 2,141,583 | 1,062,513 | 1,399,096 | 1,001,068 |
| Lehigh Valley | August | 1,251 | 5,945,303 | 292,717 | 6,539,721 | 751,020 | 1,031,756 | 130,501 | 2,446,684 | 4,581,632 | 70.1 | 1,958,089 | 868,955 | 929,024 | 377,394 |
| | 8 mos. | 1,251 | 41,201,507 | 2,367,568 | 45,561,727 | 5,735,773 | 7,883,982 | 1,066,022 | 18,643,812 | 35,155,123 | 77.2 | 10,406,604 | 4,328,368 | 4,850,464 | 3,448,070 |
| Long Island | August | 365 | 1,331,662 | 3,067,788 | 4,595,817 | 547,884 | 768,326 | 13,899 | 1,682,208 | 3,153,310 | 68.6 | 1,442,507 | 407,241 | 757,395 | 283,228 |
| | 8 mos. | 365 | 8,882,129 | 22,299,931 | 32,641,235 | 4,527,834 | 5,866,104 | 136,089 | 16,146,682 | 27,590,807 | 84.5 | 5,050,428 | 3,605,928 | —750,061 | —2,193,256 |

(Continued on page 75)

# REVENUES AND EXPENSES OF RAILWAYS

MONTH OF AUGUST AND EIGHT MONTHS OF CALENDAR YEAR 1950

| Name of road | | Av. mileage operated during period | Operating Revenues: Freight | Passenger | Total (inc. misc.) | Operating Expenses: Maintenance of Way and structures | Maintenance of Equipment | Traffic | Transportation | Total | Operating ratio | Net from railway operation | Railway tax accruals | Net railway operating income 1950 | 1949 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Louisiana & Arkansas | August | 756 | 1,858,200 | 85,401 | 1,999,540 | 316,503 | 199,836 | 45,951 | 539,947 | 1,148,243 | 57.4 | 851,297 | 370,463 | 353,033 | 268,275 |
| | 8 mos. | 756 | 12,305,649 | 528,727 | 13,374,156 | 1,662,732 | 1,447,962 | 375,970 | 3,943,016 | 7,884,373 | 59.0 | 5,489,783 | 2,202,432 | 2,541,386 | 2,077,980 |
| Louisville & Nashville | August | 4,778 | 16,540,430 | 1,153,014 | 18,628,887 | 2,216,029 | 3,380,722 | 295,164 | 6,404,768 | 12,891,567 | 69.2 | 5,737,320 | 4,096,856 | 2,692,524 | 1,059,795 |
| | 8 mos. | 4,779 | 111,972,177 | 7,972,295 | 127,028,809 | 17,861,786 | 25,768,073 | 2,416,263 | 49,810,818 | 100,357,548 | 79.0 | 26,671,261 | 18,403,405 | 13,803,005 | 9,516,249 |
| Maine Central | August | 981 | 1,857,001 | 199,432 | 2,203,067 | 432,985 | 324,442 | 18,020 | 755,754 | 1,602,378 | 72.7 | 600,689 | 346,909 | 241,520 | 120,839 |
| | 8 mos. | 981 | 13,804,821 | 1,105,364 | 15,936,486 | 3,101,701 | 2,903,004 | 152,505 | 5,728,155 | 12,424,673 | 78.0 | 3,511,813 | 1,798,896 | 1,434,582 | 1,578,927 |
| Midland Valley | August | 334 | 168,454 | 4 | 172,179 | 51,827 | 11,500 | 3,595 | 55,891 | 130,108 | 75.6 | 42,071 | 17,375 | 12,723 | 28,477 |
| | 8 mos. | 334 | 1,288,305 | 33 | 1,312,773 | 334,208 | 126,492 | 30,289 | 441,688 | 992,516 | 75.6 | 320,257 | 143,815 | 85,049 | 97,358 |
| Minneapolis & St. Louis | August | 1,416 | 2,041,756 | 10,989 | 2,110,316 | 329,080 | 260,053 | 96,456 | 561,260 | 1,338,745 | 63.4 | 771,571 | 367,778 | 331,068 | 227,933 |
| | 8 mos. | 1,416 | 12,211,105 | 57,686 | 12,632,368 | 2,200,651 | 2,000,759 | 855,439 | 4,039,017 | 9,856,594 | 78.0 | 2,775,774 | 1,397,237 | 1,141,071 | 677,281 |
| Minneapolis, St. Paul & S. S. Marie | August | 3,224 | 3,381,855 | 156,520 | 3,727,610 | 785,241 | 548,224 | 70,160 | 1,342,952 | 2,870,040 | 77.0 | 857,570 | 245,558 | 604,358 | 523,432 |
| | 8 mos. | 3,224 | 20,527,478 | 729,980 | 22,475,452 | 5,199,240 | 4,168,513 | 534,444 | 9,656,113 | 20,440,895 | 90.9 | 2,034,557 | 1,700,435 | 120,795 | 873,268 |
| Mississippi Central | August | 148 | 219,224 | 88 | 224,202 | 42,244 | 22,917 | 12,579 | 52,361 | 138,561 | 61.8 | 85,641 | 35,928 | 34,905 | 10,774 |
| | 8 mos. | 148 | 1,485,000 | 169 | 1,516,111 | 329,763 | 199,998 | 98,978 | 404,621 | 1,103,826 | 72.8 | 412,285 | 178,771 | 146,036 | 85,760 |
| Missouri-Illinois | August | 172 | 392,233 | 277 | 395,760 | 79,546 | 60,586 | 6,989 | 105,832 | 262,494 | 66.3 | 133,266 | 68,729 | 64,042 | 50,382 |
| | 8 mos. | 172 | 2,933,420 | 1,897 | 2,955,089 | 493,167 | 421,598 | 58,264 | 776,683 | 1,810,489 | 61.3 | 1,144,600 | 632,199 | 498,735 | 572,016 |
| Missouri-Kansas-Texas Lines | August | 3,243 | 5,941,503 | 364,144 | 6,858,814 | 998,923 | 947,724 | 225,000 | 2,304,635 | 4,766,356 | 69.5 | 2,092,458 | 987,452 | 842,713 | 701,082 |
| | 8 mos. | 3,248 | 42,558,730 | 2,701,048 | 49,104,365 | 7,435,793 | 6,952,628 | 1,779,793 | 17,714,621 | 36,107,821 | 73.5 | 12,996,544 | 5,479,506 | 5,106,320 | 4,221,813 |
| Missouri Pacific | August | 6,966 | 17,776,470 | 1,117,170 | 20,556,120 | 3,281,255 | 3,163,331 | 404,937 | 6,720,938 | 14,164,585 | 68.9 | 6,391,535 | 2,798,008 | 3,062,227 | 1,649,484 |
| | 8 mos. | 6,967 | 117,357,795 | 7,099,419 | 136,521,051 | 20,941,043 | 23,496,541 | 3,240,851 | 51,333,248 | 103,486,495 | 75.8 | 33,034,556 | 12,233,565 | 16,358,068 | 13,882,672 |
| Gulf Coast Lines | August | 1,711 | 3,036,913 | 98,888 | 3,338,261 | 561,956 | 532,612 | 78,204 | 1,220,976 | 2,537,180 | 76.0 | 801,081 | 225,548 | 321,179 | 376,095 |
| | 8 mos. | 1,711 | 25,273,038 | 628,592 | 27,203,865 | 4,821,844 | 3,803,324 | 600,143 | 8,854,399 | 19,081,707 | 70.1 | 8,122,158 | 2,372,384 | 3,597,752 | 3,805,022 |
| International-Great Northern | August | 1,089 | 2,440,319 | 206,434 | 2,906,438 | 551,195 | 522,980 | 52,146 | 1,135,526 | 2,383,681 | 82.0 | 522,757 | 142,874 | 235,782 | 222,582 |
| | 8 mos. | 1,102 | 18,236,668 | 1,358,984 | 21,539,477 | 3,971,542 | 3,786,523 | 405,412 | 8,297,386 | 17,345,292 | 80.5 | 4,194,185 | 1,117,157 | 1,963,543 | 1,817,070 |
| Monongahela | August | 170 | 546,403 | 705 | 550,730 | 71,967 | 79,779 | 985 | 200,412 | 359,738 | 65.3 | 190,992 | 41,674 | 34,272 | —33,208 |
| | 8 mos. | 170 | 3,691,494 | 4,526 | 3,726,394 | 542,624 | 491,088 | 7,788 | 1,436,311 | 2,525,916 | 67.8 | 1,200,478 | 315,009 | 129,879 | 340,373 |
| Montour | August | 51 | 311,726 | ..... | 311,845 | 38,733 | 85,676 | 941 | 92,431 | 223,288 | 71.6 | 88,557 | 73,066 | 64,845 | 56,161 |
| | 8 mos. | 51 | 1,697,372 | ..... | 1,700,768 | 232,996 | 520,288 | 6,950 | 559,597 | 1,396,768 | 82.1 | 304,000 | 335,539 | 347,921 | 463,488 |
| Nashville, Chatt. & St. Louis | August | 1,049 | 2,778,600 | 164,261 | 3,198,150 | 567,892 | 452,694 | 101,671 | 1,086,167 | 2,314,809 | 72.4 | 883,341 | 446,878 | 456,962 | 300,243 |
| | 8 mos. | 1,049 | 19,412,144 | 1,133,850 | 22,618,899 | 3,874,050 | 3,155,072 | 816,699 | 8,284,804 | 16,978,676 | 75.1 | 5,640,223 | 2,851,158 | 2,699,670 | 1,977,813 |
| New York Central | August | 10,733 | 52,393,193 | 10,470,205 | 70,191,965 | 8,572,266 | 13,843,090 | 1,053,012 | 28,546,700 | 54,756,393 | 78.0 | 15,435,572 | 6,673,524 | 6,782,652 | 3,822,517 |
| | 8 mos. | 10,733 | 347,146,549 | 75,284,010 | 470,961,211 | 54,710,928 | 101,944,862 | 7,993,434 | 214,215,344 | 401,468,658 | 85.2 | 69,492,553 | 37,254,021 | 18,757,955 | 18,328,739 |
| Pittsburgh & Lake Erie | August | 221 | 3,383,490 | 72,620 | 3,591,081 | 497,134 | 943,601 | 67,651 | 1,170,148 | 2,875,626 | 80.1 | 715,455 | 676,632 | 613,326 | 272,220 |
| | 8 mos. | 221 | 25,067,534 | 586,205 | 26,621,588 | 2,906,930 | 6,860,264 | 542,682 | 9,420,683 | 21,192,655 | 79.6 | 5,428,933 | 4,500,891 | 5,244,169 | 4,896,319 |
| New York, Chicago & St. Louis | August | 2,192 | 12,690,975 | 184,465 | 13,372,139 | 1,417,448 | 2,072,331 | 278,532 | 4,350,490 | 8,511,800 | 63.7 | 4,860,339 | 2,275,877 | 2,207,995 | 1,261,369 |
| | 8 mos. | 2,192 | 89,779,412 | 1,171,184 | 93,760,316 | 11,406,886 | 14,607,531 | 2,274,794 | 31,289,188 | 62,740,310 | 66.9 | 31,020,006 | 13,214,131 | 15,565,443 | 12,914,692 |
| New York, New Haven & Hartford | August | 1,795 | 8,208,214 | 4,118,429 | 13,524,067 | 1,880,611 | 1,994,488 | 181,852 | 5,416,315 | 10,132,717 | 74.9 | 3,391,350 | 1,305,000 | 894,131 | 492,283 |
| | 8 mos. | 1,795 | 57,635,614 | 30,727,114 | 96,654,392 | 13,535,271 | 14,621,513 | 1,580,159 | 40,501,432 | 75,479,580 | 78.1 | 21,174,812 | 7,772,000 | 6,513,711 | 5,925,592 |
| New York Connecting | August | 21 | 241,937 | ..... | 260,048 | 84,525 | 18,282 | ..... | 52,383 | 157,638 | 60.6 | 102,410 | 65,340 | 57,382 | —41,910 |
| | 8 mos. | 21 | 1,906,088 | ..... | 1,988,863 | 565,559 | 152,052 | ..... | 464,620 | 1,202,224 | 60.4 | 786,639 | 494,595 | 420,273 | 78,491 |
| New York, Ontario & Western | August | 544 | 622,096 | 30,861 | 690,043 | 130,351 | 92,269 | 26,837 | 293,077 | 571,476 | 82.8 | 118,567 | 40,275 | 368 | —45,138 |
| | 8 mos. | 544 | 4,270,745 | 94,513 | 4,622,670 | 831,423 | 700,768 | 200,490 | 2,248,362 | 4,211,532 | 91.1 | 411,138 | 307,538 | —475,989 | —491,091 |
| New York, Susquehanna & Western | August | 120 | 408,080 | 38,082 | 464,932 | 48,149 | 49,767 | 6,893 | 185,338 | 306,526 | 65.9 | 158,406 | 36,830 | 74,072 | 3,249 |
| | 8 mos. | 120 | 2,921,435 | 310,857 | 3,336,166 | 370,703 | 405,611 | 51,285 | 1,406,771 | 2,447,899 | 73.4 | 888,267 | 257,863 | 334,261 | 132,674 |
| Norfolk & Western | August | 2,127 | 14,502,949 | 463,795 | 15,441,325 | 2,369,891 | 3,019,177 | 270,128 | 4,304,628 | 10,531,781 | 68.2 | 4,910,044 | 3,467,703 | 2,948,764 | 1,446,681 |
| | 8 mos. | 2,128 | 97,759,759 | 2,925,005 | 104,493,460 | 16,295,671 | 22,205,029 | 2,050,842 | 32,340,727 | 77,015,129 | 73.7 | 27,478,331 | 18,729,797 | 16,666,162 | 16,730,636 |
| Norfolk Southern | August | 673 | 818,641 | ..... | 839,898 | 151,912 | 104,452 | 41,270 | 283,231 | 645,070 | 76.8 | 194,818 | 96,348 | 67,365 | 46,676 |
| | 8 mos. | 678 | 5,760,906 | 1,392 | 5,904,424 | 1,207,908 | 784,608 | 340,555 | 1,953,434 | 4,770,351 | 80.8 | 1,134,073 | 512,930 | 398,950 | 379,106 |
| Northern Pacific | August | 6,903 | 15,281,557 | 671,268 | 16,973,749 | 2,310,811 | 2,372,621 | 247,267 | 5,085,132 | 10,639,329 | 62.7 | 6,334,420 | 3,144,416 | 3,659,435 | 2,011,738 |
| | 8 mos. | 6,896 | 84,864,455 | 3,953,879 | 95,756,451 | 16,885,529 | 19,978,698 | 2,032,530 | 37,095,913 | 80,675,047 | 84.3 | 15,081,404 | 11,356,672 | 7,406,853 | 5,426,684 |
| Northwestern Pacific | August | 331 | 1,007,030 | 7,686 | 1,046,301 | 203,944 | 105,216 | 4,850 | 430,267 | 757,413 | 72.4 | 288,888 | 122,929 | 83,464 | 181,365 |
| | 8 mos. | 331 | 6,526,832 | 36,354 | 6,755,737 | 1,438,018 | 700,596 | 36,237 | 2,924,665 | 5,210,531 | 77.1 | 1,545,206 | 637,915 | 380,794 | —123,669 |
| Oklahoma City-Ada-Atoka | August | 132 | 85,122 | ..... | 87,161 | 22,116 | 4,991 | 1,393 | 20,821 | 53,144 | 61.0 | 34,017 | 14,260 | 7,338 | 13,615 |
| | 8 mos. | 132 | 635,429 | ..... | 644,269 | 181,104 | 32,986 | 11,341 | 173,853 | 430,891 | 66.9 | 213,378 | 80,391 | 33,763 | 64,187 |
| Pennsylvania | August | 10,118 | 65,533,981 | 12,053,873 | 86,061,851 | 11,014,428 | 20,616,822 | 1,204,174 | 33,438,799 | 69,478,845 | 80.7 | 16,583,006 | 8,237,992 | 6,804,963 | 453,599 |
| | 8 mos. | 10,118 | 433,379,526 | 91,798,304 | 576,000,025 | 72,347,492 | 134,267,695 | 9,033,108 | 247,987,707 | 486,458,309 | 84.5 | 89,541,716 | 42,166,495 | 35,268,994 | 30,191,971 |
| Pennsylvania-Reading Seashore Lines | August | 386 | 659,803 | 506,875 | 1,205,021 | 155,911 | 96,081 | 16,231 | 676,970 | 978,631 | 81.2 | 226,390 | 106,739 | —42,006 | —101,544 |
| | 8 mos. | 386 | 4,007,267 | 1,913,397 | 6,102,839 | 1,365,246 | 1,357,283 | 91,524 | 4,499,827 | 7,578,088 | 124.2 | —1,475,249 | 723,903 | —3,201,666 | —3,044,394 |
| Pittsburg & Shawmut | August | 97 | 242,407 | ..... | 242,864 | 87,540 | 47,281 | 2,607 | 59,540 | 206,709 | 85.1 | 36,155 | 14,485 | 14,582 | 37,918 |
| | 8 mos. | 97 | 1,667,159 | ..... | 1,672,277 | 338,545 | 327,787 | 22,900 | 419,325 | 1,185,059 | 70.9 | 487,218 | 147,835 | 298,954 | 262,761 |

(Continued on page 76)

# REVENUES AND EXPENSES OF RAILWAYS

MONTH OF AUGUST AND EIGHT MONTHS OF CALENDAR YEAR 1950

| Name of road | | Av. mileage operated during period | Operating Revenues | | | Operating Expenses | | | | | Operating ratio | Net from railway operation | Railway tax accruals | Net railway operating income | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Freight | Passenger | Total (inc. misc.) | Maintenance of Way and structures | Maintenance of Equipment | Traffic | Transportation | Total | | | | 1950 | 1949 |
| Pittsburgh & West Virginia | August | 132 | 779,487 | ..... | 803,880 | 180,118 | 174,457 | 40,114 | 188,942 | 619,495 | 77.1 | 184,385 | 93,438 | 121,356 | 17,557 |
| | 8 mos. | 132 | 5,283,754 | ..... | 5,444,735 | 1,101,914 | 1,108,692 | 328,596 | 1,370,688 | 4,187,142 | 76.9 | 1,257,593 | 614,427 | 891,573 | 837,840 |
| Reading | August | 1,317 | 9,993,049 | 522,971 | 11,073,949 | 1,671,556 | 2,347,578 | —135,619 | 4,016,304 | 8,479,391 | 76.6 | 2,594,558 | 1,233,293 | 1,221,911 | 587,212 |
| | 8 mos. | 1,317 | 66,931,730 | 4,309,550 | 74,918,385 | 10,720,192 | 15,564,991 | 1,055,429 | 29,776,613 | 59,458,256 | 79.4 | 15,460,129 | 7,261,606 | 7,998,748 | 6,115,055 |
| Richmond, Fredericksburg & Potomac | August | 118 | 1,144,237 | 479,209 | 1,887,761 | 282,790 | 269,492 | 18,161 | 595,651 | 1,271,044 | 67.3 | 616,717 | 313,704 | 233,525 | —76,457 |
| | 8 mos. | 118 | 9,620,667 | 3,969,612 | 15,474,290 | 1,942,715 | 2,203,296 | 146,996 | 5,080,765 | 10,302,374 | 66.6 | 5,171,916 | 2,346,297 | 2,087,249 | 485,557 |
| Rutland | August | 407 | 449,000 | 47,681 | 575,106 | 77,805 | 82,719 | 13,728 | 263,449 | 455,973 | 79.3 | 119,133 | 31,185 | 80,463 | 18,312 |
| | 8 mos. | 407 | 2,937,742 | 235,744 | 3,696,213 | 568,724 | 638,149 | 111,541 | 1,983,375 | 3,441,788 | 93.1 | 254,425 | 227,615 | —127,678 | —410,839 |
| Sacramento Northern | August | 271 | 502,375 | ..... | 509,296 | 67,555 | 15,944 | 1,929 | 107,402 | 201,175 | 39.5 | 308,121 | 120,415 | 161,615 | 92,928 |
| | 8 mos. | 271 | 1,802,604 | 1,010 | 1,843,544 | 412,426 | 129,739 | 17,377 | 601,266 | 1,221,730 | 66.3 | 621,814 | 238,666 | 245,600 | —236,331 |
| St. Louis-San Francisco | August | 4,635 | 8,920,066 | 580,352 | 10,209,299 | 1,544,571 | 1,491,667 | 242,313 | 3,459,958 | 7,160,347 | 70.1 | 3,048,952 | 1,579,608 | 1,626,718 | 772,227 |
| | 8 mos. | 4,637 | 62,939,679 | 3,584,421 | 71,491,626 | 11,675,854 | 12,091,303 | 1,853,130 | 26,717,964 | 55,546,842 | 77.7 | 15,944,784 | 8,432,728 | 7,924,019 | 4,959,832 |
| St. Louis, San Francisco & Texas | August | 159 | 335,770 | 9,237 | 368,137 | 49,004 | 33,558 | 15,239 | 136,704 | 244,769 | 66.5 | 123,368 | 43,641 | 33,067 | 46,208 |
| | 8 mos. | 159 | 2,422,744 | 67,266 | 2,668,341 | 392,929 | 271,084 | 121,527 | 1,092,733 | 1,958,401 | 73.4 | 709,940 | 157,633 | 139,401 | 237,280 |
| St. Louis Southwestern Lines | August | 1,569 | 5,642,895 | 69,714 | 5,927,077 | 531,018 | 582,161 | 141,453 | 1,587,108 | 3,013,477 | 50.8 | 2,913,600 | 1,340,045 | 1,356,489 | 671,844 |
| | 8 mos. | 1,569 | 37,761,204 | 369,943 | 39,659,357 | 5,475,509 | 4,657,483 | 1,119,793 | 11,986,580 | 24,597,767 | 62.0 | 15,061,590 | 6,253,374 | 7,082,261 | 5,531,930 |
| Seaboard Air Line | August | 4,146 | 8,970,624 | 1,051,980 | 10,727,719 | 1,414,929 | 1,785,388 | 304,027 | 3,567,725 | 7,521,821 | 70.1 | 3,205,898 | 1,564,181 | 1,575,794 | 899,608 |
| | 8 mos. | 4,146 | 72,074,575 | 9,711,081 | 87,788,603 | 13,563,924 | 15,003,119 | 2,521,059 | 30,851,257 | 65,762,332 | 74.9 | 22,026,271 | 9,862,388 | 10,292,321 | 7,209,823 |
| Southern Ry | August | 6,347 | 18,830,263 | 1,903,112 | 22,046,650 | 2,805,840 | 3,747,872 | 362,566 | 7,232,446 | 14,948,020 | 67.8 | 7,098,630 | 4,180,758 | 2,639,720 | 1,956,028 |
| | 8 mos. | 6,347 | 127,189,117 | 11,004,221 | 148,458,970 | 20,333,844 | 27,297,350 | 2,838,528 | 53,163,489 | 109,742,618 | 73.9 | 38,716,352 | 19,007,002 | 17,470,160 | 12,736,136 |
| Alabama Great Southern | August | 316 | 1,384,806 | 126,203 | 1,614,857 | 223,354 | 323,296 | 31,092 | 520,114 | 1,156,140 | 71.6 | 458,717 | 347,378 | 151,546 | 127,117 |
| | 8 mos. | 316 | 9,517,001 | 720,009 | 11,068,253 | 1,619,115 | 2,292,159 | 226,056 | 3,825,409 | 8,409,434 | 76.0 | 2,658,819 | 1,700,090 | 1,135,381 | 979,345 |
| Cinn., New Orleans & Texas Pacific | August | 337 | 3,243,718 | 200,736 | 3,621,019 | 426,030 | 609,862 | 60,339 | 914,727 | 2,115,719 | 58.4 | 1,505,300 | 1,000,692 | 583,341 | 384,480 |
| | 8 mos. | 337 | 23,319,281 | 1,413,862 | 25,992,303 | 3,188,000 | 4,553,925 | 481,035 | 7,503,429 | 16,595,275 | 63.8 | 9,397,028 | 4,792,420 | 4,729,242 | 4,298,892 |
| Georgia Southern & Florida | August | 397 | 541,778 | 91,932 | 693,389 | 159,105 | 84,426 | 7,089 | 231,469 | 498,672 | 71.9 | 194,717 | 66,264 | 55,054 | 69,665 |
| | 8 mos. | 397 | 3,991,246 | 622,699 | 5,045,826 | 1,090,892 | 441,377 | 55,537 | 1,620,972 | 3,359,216 | 66.6 | 1,686,610 | 396,540 | 381,841 | 346,330 |
| New Orleans & Northeastern | August | 204 | 1,081,070 | 74,386 | 1,205,367 | 156,874 | 105,470 | 18,410 | 258,231 | 580,284 | 48.1 | 625,083 | 376,593 | 190,292 | 179,300 |
| | 8 mos. | 204 | 6,805,853 | 433,777 | 7,613,010 | 1,147,323 | 772,832 | 132,101 | 1,793,299 | 4,155,257 | 54.6 | 3,457,753 | 1,672,032 | 1,419,768 | 1,114,988 |
| Southern Pacific | August | 8,144 | 38,630,745 | 4,342,448 | 45,784,347 | 4,649,472 | 8,239,740 | 767,847 | 15,590,235 | 31,254,141 | 68.3 | 14,530,206 | 7,734,994 | 5,320,397 | 3,923,717 |
| | 8 mos. | 8,143 | 252,640,855 | 25,110,069 | 295,834,610 | 34,085,326 | 58,942,586 | 5,644,770 | 110,596,918 | 223,635,246 | 75.6 | 72,199,364 | 36,066,976 | 24,038,306 | 16,175,617 |
| Texas & New Orleans | August | 4,316 | 9,912,973 | 871,095 | 11,536,162 | 1,768,121 | 1,563,391 | 253,541 | 4,073,912 | 8,157,177 | 70.7 | 3,378,985 | 1,684,224 | 968,218 | 1,448,742 |
| | 8 mos. | 4,316 | 69,634,869 | 5,148,970 | 79,869,784 | 13,106,530 | 11,824,347 | 1,746,574 | 29,541,941 | 59,885,654 | 75.0 | 19,984,130 | 8,519,182 | 6,760,029 | 7,557,635 |
| Spokane International | August | 152 | 165,900 | 860 | 181,605 | 38,916 | 17,153 | 4,667 | 52,759 | 122,024 | 67.2 | 59,581 | —1,741 | 42,176 | —8,414 |
| | 8 mos. | 152 | 1,432,019 | 7,662 | 1,539,751 | 325,794 | 144,365 | 34,388 | 415,558 | 992,133 | 64.5 | 547,618 | 149,289 | 274,349 | 13,380 |
| Spokane, Portland & Seattle | August | 944 | 2,138,218 | 106,440 | 2,368,738 | 446,815 | 258,060 | 27,002 | 728,090 | 1,543,312 | 65.2 | 825,426 | 161,174 | 633,856 | 448,760 |
| | 8 mos. | 944 | 14,896,899 | 639,503 | 16,417,718 | 3,427,533 | 2,096,187 | 168,421 | 5,500,489 | 11,820,074 | 72.0 | 4,597,644 | 1,323,403 | 2,699,783 | 1,703,482 |
| Tennessee Central | August | 286 | 427,928 | 5,134 | 455,115 | 76,967 | 57,686 | 10,281 | 141,022 | 305,160 | 67.1 | 149,955 | 24,145 | 92,560 | 60,643 |
| | 8 mos. | 286 | 2,871,059 | 24,101 | 3,043,819 | 568,201 | 443,467 | 80,067 | 1,037,910 | 2,270,682 | 74.6 | 773,137 | 193,771 | 328,105 | 187,024 |
| Texas & Northern | August | 8 | 103,653 | ..... | 118,194 | 2,903 | 7,856 | 998 | 21,306 | 36,831 | 31.2 | 81,363 | 31,404 | 36,608 | 1,819 |
| | 8 mos. | 8 | 686,064 | ..... | 774,616 | 24,278 | 40,797 | 5,945 | 138,096 | 241,078 | 31.1 | 533,538 | 184,610 | 255,619 | 169,522 |
| Texas & Pacific | August | 1,846 | 5,258,421 | 630,523 | 6,377,558 | 866,568 | 848,649 | 151,658 | 1,959,865 | 4,127,960 | 64.7 | 2,249,598 | 954,860 | 903,290 | 482,423 |
| | 8 mos. | 1,846 | 37,647,510 | 3,110,243 | 44,236,714 | 6,421,991 | 6,855,548 | 1,238,741 | 15,306,281 | 32,054,730 | 72.5 | 12,181,984 | 4,197,792 | 5,384,104 | 4,388,644 |
| Texas Mexican | August | 162 | 277,221 | ..... | 310,571 | 48,905 | 26,492 | 6,510 | 67,039 | 165,269 | 53.2 | 145,302 | 55,486 | 60,449 | 44,937 |
| | 8 mos. | 162 | 2,062,855 | ..... | 2,278,496 | 432,711 | 179,371 | 50,615 | 458,917 | 1,248,636 | 54.8 | 1,029,860 | 411,772 | 427,728 | 338,390 |
| Toledo, Peoria & Western | August | 239 | 561,159 | 57 | 572,302 | 82,197 | 28,840 | 40,202 | 114,973 | 288,653 | 50.4 | 283,649 | 117,101 | 122,746 | 57,944 |
| | 8 mos. | 239 | 3,482,941 | 114 | 3,540,288 | 547,883 | 252,127 | 287,825 | 814,447 | 2,090,673 | 59.1 | 1,449,615 | 549,469 | 601,663 | 426,040 |
| Union Pacific | August | 9,720 | 39,445,555 | 3,688,870 | 46,360,036 | 6,010,319 | 6,984,869 | 722,671 | 14,412,218 | 30,178,824 | 65.1 | 16,181,212 | 8,202,783 | 5,908,362 | 3,833,191 |
| | 8 mos. | 9,719 | 236,303,422 | 22,127,008 | 279,728,804 | 41,084,279 | 50,004,893 | 6,390,927 | 97,007,611 | 209,244,937 | 74.8 | 70,483,867 | 39,257,216 | 20,102,789 | 4,318,805 |
| Utah | August | 110 | 163,574 | ..... | 163,826 | 19,681 | 45,064 | 764 | 63,336 | 135,748 | 82.9 | 28,078 | 11,375 | 30,644 | —3,879 |
| | 8 mos. | 110 | 858,480 | ..... | 861,959 | 151,666 | 381,000 | 5,610 | 390,279 | 987,528 | 114.6 | —125,569 | 93,423 | —134,736 | —204,318 |
| Virginian | August | 643 | 3,194,430 | 3,414 | 3,261,627 | 377,683 | 640,029 | 38,345 | 673,732 | 1,807,317 | 55.4 | 1,454,310 | 845,000 | 933,546 | 552,341 |
| | 8 mos. | 654 | 19,995,222 | 20,845 | 20,429,023 | 2,765,653 | 4,411,454 | 297,320 | 4,740,319 | 12,823,326 | 62.8 | 7,605,697 | 4,139,100 | 5,280,766 | 4,958,459 |
| Wabash | August | 2,393 | 7,576,550 | 483,233 | 8,680,041 | 1,299,511 | 1,140,259 | 254,340 | 3,438,959 | 6,465,589 | 74.5 | 2,214,452 | 941,936 | 794,641 | 527,342 |
| | 8 mos. | 2,393 | 58,855,477 | 2,994,465 | 66,248,278 | 9,277,040 | 8,876,595 | 2,030,327 | 27,442,702 | 50,097,698 | 75.6 | 16,150,580 | 6,620,057 | 5,945,175 | 3,884,186 |
| Ann Arbor | August | 294 | 830,700 | ..... | 879,410 | 88,260 | 97,546 | 24,144 | 348,930 | 580,048 | 66.0 | 299,362 | 126,342 | 147,340 | 7,374 |
| | 8 mos. | 294 | 6,031,255 | 11,961 | 6,209,391 | 675,903 | 783,344 | 185,892 | 2,695,017 | 4,477,934 | 72.1 | 1,731,457 | 576,365 | 916,228 | 252,643 |
| Western Maryland | August | 837 | 3,802,124 | 13,626 | 3,961,505 | 512,696 | 742,512 | 72,153 | 1,106,891 | 2,577,579 | 65.1 | 1,383,926 | 809,000 | 803,915 | 580,321 |
| | 8 mos. | 837 | 24,940,730 | 76,383 | 26,041,238 | 3,451,586 | 5,296,236 | 579,656 | 7,994,743 | 18,408,723 | 70.7 | 7,632,515 | 4,101,000 | 5,028,722 | 4,925,159 |
| Western Pacific | August | 1,195 | 4,926,917 | 402,492 | 5,430,384 | 564,334 | 607,227 | 149,369 | 1,355,231 | 2,861,880 | 52.7 | 2,568,504 | 1,126,573 | 1,316,886 | 219,059 |
| | 8 mos. | 1,195 | 26,214,922 | 1,838,125 | 28,705,836 | 4,198,663 | 4,445,380 | 1,138,132 | 8,911,022 | 20,110,597 | 70.1 | 8,595,239 | 3,590,748 | 4,557,785 | 2,408,526 |
| Wisconsin Central | August | 1,051 | 2,749,864 | 54,973 | 2,972,384 | 298,501 | 357,138 | 60,924 | 978,820 | 1,789,277 | 60.2 | 1,183,107 | 442,814 | 594,631 | 267,636 |
| | 8 mos. | 1,051 | 17,476,390 | 299,913 | 18,820,557 | 2,672,067 | 2,748,608 | 473,112 | 7,248,190 | 13,839,490 | 73.5 | 4,981,066 | 1,577,718 | 2,229,451 | 1,539,580 |

**OHIO** LOCOMOTIVE CRANES

25 TO 40 TON CAPACITY

GASOLINE • DIESEL
ELECTRIC • STEAM

THE OHIO LOCOMOTIVE CRANE CO.
BUCYRUS, OHIO

**SIDE FRAMES and BOLSTERS**
FOR FREIGHT CARS

THE OHIO STEEL FOUNDRY CO. — LIMA, OHIO

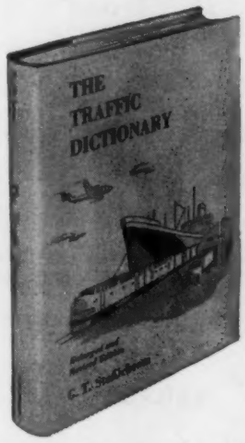
**GOLD**
CAR HEATING SPECIALTIES OF QUALITY
★ STEAM
★ VAPOR
★ ELECTRIC

GOLD CAR HEATING & LIGHTING CO.
33-35TH STREET, BROOKLYN 32, N.Y.

**BUY BONDS**

New Fourth Edition

**THE TRAFFIC DICTIONARY**




By GEORGE T. STUFFLEBEAM
*Manager, Transportation Research, Remington-Rand*

Enlarged and brought up to date this handbook contains 4,000 terms, phrases, code marks and abbreviations used in all branches of transportation. Terms used in warehousing, shipping documents, claim procedure and practice before the I.C.C. are included. Not only traffic managers but anyone concerned with shipping or traffic department work needs a copy of this standard reference.
320 pages, 4½ x 6, $3.75

**SENT ON TEN DAYS' APPROVAL**

Simmons-Boardman Publishing Corporation
30 Church Street, New York 7, N. Y.

Please send me a copy of the new edition of Stufflebeam's TRAFFIC DICTIONARY, on Ten Days' Approval. If satisfactory I will remit the list price of $3.75; otherwise I will return the book.

Name .....

Address .....

City ..... Zone..... State.....
(This offer is limited to retail customers in the United States) R.A. 10-21-50

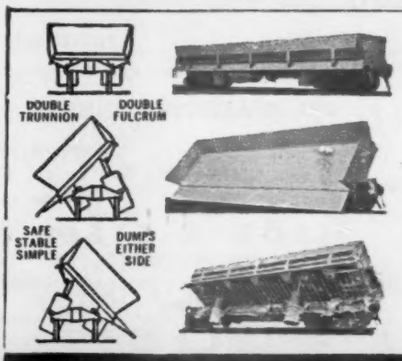
**UNEQUALLED**

...FOR MOISTURE-PROOF SPLICES

...users who KNOW buy only the BEST

*Ask for them by name...*

OKONITE and MANSON tapes




AIR DUMP CARS

RAIL CARS
MINE CARS
AND
LOCOMOTIVES
AXLESS TRAINS

COMPLETE HAULAGE SYSTEMS

DIFFERENTIAL STEEL CAR CO.
FINDLAY, OHIO

RAILROAD EQUIPMENT
CARS—LOCOMOTIVES
REPAIR PARTS

RELAYING RAILS

STEEL STORAGE TANKS
6000—8000—10000 gal. cap.
CLEANED AND TESTED

THE PURDY COMPANY
122 S. Michigan Avenue Chicago 3, Illinois

CLASSIFIED ADVERTISEMENTS: $5.00 AN INCH (1" X 1⅜") PER INSERTION
EMPLOYMENT ADVERTISEMENTS: TEN CENTS A WORD: MINIMUM $2.00

# RAILROAD EQUIPMENT—*FOR SALE*

**STANDARD GAUGE FREIGHT CARS**

Box, Single Sheathed, 40 & 50-Ton
Flats, 50 and 70-Ton
Gondolas, Composite, 50 & 70-Ton
Gondola, All-Steel, 90-Ton
Hoppers, Covered, All-Steel, 50 & 70-Ton
Hoppers, Twin, All-Steel, 50-Ton, Cross Dump
Hoppers, Twin, All-Steel, 50-Ton, Side Dump
Hoppers, Triple, All-Steel, 70-Ton, Cross Dump
Ore Hopper, All-Steel, 50-Ton, Center Dump
Tank, 10,000-Gallon, Class III
Tank, 8,000-Gallon, Class II
Caboose, 8-Wheel, with AB Brakes

**STANDARD GAUGE DUMP CARS**

End Dump, 10-Yd., 30-Ton, Lift Door
End Dump, 20-Yd., 50-Ton, Drop Door
Side Dump, 16-Yd., 40-Ton, Lift Door
Side Dump, 20-Yd., 40-Ton, Lift Door
Side Dump, 30-Yd., 50-Ton, Lift Door

**STANDARD GAUGE LOCOMOTIVES**

33-Ton, Gasoline
Gasoline—10-Ton to 25-Ton
Diesel-Mechanical—8-Ton to 30-Ton
Gasoline-Electric—35-Ton
Propane-Electric—70-Ton

**PASSENGER EQUIPMENT**

All types of Passenger & Baggage Equipment, including Self-Propelled!

**4 ALL-STEEL DINING CARS, AIR-CONDITIONED**

***Send us your inquiries***
**We Buy Freight Cars for Dismantling**
***Send us your offerings***

**REPAIR PARTS**
**For**
**All Types of**
**Freight Cars**

## IRON & STEEL PRODUCTS, INC.

GENERAL OFFICE
13486 S. Brainard Ave., Chicago 33, Illinois
Phone: BAyport 1-3456

NEW YORK OFFICE
50-c Church St., New York 7, N. Y.
Phone: BEekman 3-8230

*"ANYTHING containing IRON or STEEL"*

**STORAGE TANKS**
**6,000 Gallon**
**8,000 Gallon**
**10,000 Gallon**

## *NEW AND USED EQUIPMENT*

**85# A.S.C.E. Relaying Rail**

**2500 tons**
**for immediate delivery from stock**

**HYMAN-MICHAELS COMPANY**
122 SO. MICHIGAN AVE.
CHICAGO 3, ILL.

*Service - Quality - Reliability*

## *POSITION WANTED*

Young commercial photographer with ten years' experience, and great interest in railroading desires position with a progressive railroad, for the furtherance of good public relations. Quite familiar with railroad practices. Address Box 566, RAILWAY AGE, 30 Church Street, New York 7, N. Y.

Retired Operating Officer, wide experience, available to railroads and financial interests for specialized service. Address Box 541, RAILWAY AGE, 30 Church St., New York 7, N. Y.

**Educational Services**
**for**
**RAILROAD MEN**

**Our New Service**
**on**
**Diesel Locomotive**
**Operation**
**is highly recommended**
**for**
**Engineers and Firemen**

***The Railway***
***Educational Bureau***
***Omaha 2, Nebraska***

Robert W. Hunt Company
*ENGINEERS*
Inspection—Tests—Consultation
All Railway Equipment
Structures and Materials
General Office:
175 W. Jackson Boulevard
CHICAGO
New York - Pittsburgh - St. Louis

**FOR SALE**
**DIESEL ELECTRIC LOCOMOTIVE**
1—G.E. 44-Ton, Heavy Duty Diesel Electric. Late model.
One—Porter 35 ton Fireless.
1—Plymouth 30 ton Diesel Mechanical
**AIR DUMP CARS**
26—Western 20 yd. Lift Doors.
**AIR COMPRESSOR**
Chicago Pneumatic PM-4, 2 Stage, 360 CFM Actual @ 100#, 3-60-440, #43917, Late Model, Like New.
R. H. BOYER, 2005-13 W. Bellevue Street, Philadelphia 40, Pa.

## RAILS
Relay & New. Track Accessories
**W. H. DYER CO., INC.**
611 Olive St. St. Louis, Mo.
Stocks at Various Points

## FOR SALE
65/80 ton Whitcomb diesel electric switching locomotives, new 1944.
25 ton American gas locomotive crane. Magnet generator.
20 yd. Koppel all steel air dump cars. 19 available.
**MISSISSIPPI VALLEY EQUIPMENT CO.**
509 Locust St. St. Louis 1, Mo.

## FOR SALE — DIESEL ENGINES
GENERAL MOTORS 12-567 FAIRBANKS-MORSE 38-D8⅛
Largest Inventory in the country
INSPECTION INVITED Priced at fraction of original cost.
DIESEL DIVISION
**NATIONAL METAL & STEEL CORP.**
DEPT. RA, TERMINAL ISLAND (LOS ANGELES HARBOR), CALIF.
PHONE: LOS ANGELES—NEVADA 6-2517

## LOOKING FOR A JOB?
*Use The*
Classified Department
"Position Wanted"
Column.
*Write To:*
CLASSIFIED DEPARTMENT
RAILWAY AGE
30 Church St., New York 7, N. Y.

NEW RAILROAD TIE
Unique 20th Century device. Patent Pending. INVENTOR HAS OVER FIFTY YEARS' RAILROAD WORLD ENGINEERING . . . Tie is steel, insulated etc. INEXPENSIVE . . . Diagram quickly convinces, genius meritorious . . . Chosen scientifically, and/or announced by topflight, renowned sales cousel . . . License preference. Address Box 568 RAILWAY AGE, 30 Church Street, New York 7, N. Y.

This new book is beautifully illustrated with 116 fine 8½ x 5-inch photographs of railroading in and around New York. Authoritative information is given on how this intricate rail network operates. Latest official five-color New York Harbor Terminals and Rapid Transit System maps show all points of interest to railroad men. Ask to see a copy at your local bookstore or send for one on ten days' approval.

144 pages, 116 illus., 2 maps, 10½ x 8, boards, $4.00

**Book Department**

**SIMMONS-BOARDMAN PUBLISHING CORP.**
30 Church Street New York 7, N. Y.

## FOR SALE
3—50 KVA. 25 CYCLE. I PHASE. H.V. 2300 L.V. 110/220. ALLIS-CHALMERS.
1—75 KVA. 60 CYCLE. 4150/2300. G. E. AUTO TRANS.
3—25 KVA. 25 CYCLE H.V. 2300 — L.V. 110/220. I PHASE. MALONEY TRANS.
1—15 KVA. 25 CYCLE. H.V. 1150/2300 L.V. 115/230, I PHASE. GENERAL ELEC.
1—7½ KW. 25 CYCLE. H.V. 1100 L.V. 110/220. WESTINGHOUSE
2—1½ KVA. 25 CYCLE. H.V. 550/1100. L.V. 110 I PHASE. WESTINGHOUSE
3—1½ KVA. 25 CYCLE. H.V. 1100/1905y L.V. 110/220 I PHASE. WESTINGHOUSE
1—3 KVA. 25 CYCLE. H.V. 1200 L.V. 120/240 I PHASE. WAGNER TRANS.
1—3 KVA. 25 CYCLE. H.V. 1100 L.V. 110/220 I PHASE. STOCKWELL
3—650 D.C. MOTORS. 5 H.P.
1—650 D.C. MOTOR. 15 H.P. 1150 RPM—25.5 AMPs.
1—TWIN AIR COMPRESSOR. WESTINGHOUSE AIR BRAKE CO.
TYPE SWA 3-HP. ¾ MAX. PRESSURE 150 LB. DISPLACEMENT 3 CUBIC FEET AT 1425 RPM 2 H.P. MOTOR VOLTAGE 220. 25 CYCLE.
72—SUSPENSION INSULATORS TYPE B2 LOCKE CO. 5800
17—INSULATORS PIN. TYPE P. 66000V LOCKE CO. 1066
12—IMPEDENCE BONDS—D.C. PROPULSION 1500A-650V-1 or 4 OHM RES.

ADDRESS PROPOSALS OR INSPECTION REQUESTS TO—
MR. HARRY BABCOCK, GENERAL MANAGER
**PENNSYLVANIA-READING SEASHORE LINES**
22 FEDERAL STREET CAMDEN, NEW JERSEY

# USED EQUIPMENT
# To Sell?
***Advertise It In***
**The CLASSIFIED DEPARTMENT**

# Advertisers

## IN THIS ISSUE


Alan Wood Steel Company ..... 66
American Locomotive Company .....70, 71
American Steel Foundries ..... 11

Baldwin Locomotive Works, The ....42, 43, 60
Bethlehem Steel Company ..... 3
Boyer, R. H. ..... 79

Chicago Steel Service Company ..... 80
Classified Department .....78, 79
Cummins Engine Company, Inc. ..... 53

Differential Steel Car Co. ..... 77
du Pont de Nemours & Co., (Inc.) F. I... 81
Dyer Co., Inc., W. H. ..... 79

Edgewater Steel Company ..... 9
Electro-Motive Division, General Motors Corporation .....48, 49

General American Transportation Corporation 12
General Electric Company .....70, 71
General Railway Signal Company ...Back Cover
General Steel Castings ..... 59
Gold Car Heating & Lighting Co. ..... 77

Harrison Radiator Division of General Motors Corporation ..... 10
Hotel Cleveland ..... 68
Hunt Company, Robert W. ..... 79
Hyman-Michaels Company .... ..... 78

Iron & Steel Products, Inc. ..... 78

Lamson & Sessions Co., The ..... 65
Lee Rubber & Tire Corporation, Republic Rubber Division ..... 50
Lewis-Shepard Products, Inc. ..... 67
Lima-Hamilton Corporation ..... 8

Met-L-Wood Corporation ..... 72
Mississippi Valley Equipment Co. ..... 79

National Metal and Steel Corporation .... 79

Ohio Locomotive Crane Co., The ..... 77
Ohio Steel Foundry Co., The ..... 77
Okonite Co., The ..... 77
Oxweld Railroad Service Company, The, Union Carbide and Carbon Corporation.. 47

Pennsylvania Reading Seashore Lines .... 79
Pullman-Standard Car Manufacturing Company .....38, 39
Purdy Company, The ..... 77

Railway Educational Bureau, The ..... 78
Republic Rubber Division, Lee Rubber & Tire Corporation .....50

Scullin Steel Co. ..... 45
Signode Steel Strapping Company ..... 69
Simmons-Boardman Publishing Corporation 77, 79
Socony-Vacuum Oil Company, Inc. ..... 57
Standard Railway Equipment Manufacturing Company ..... 55
Standard Steel Works Division, The Baldwin Locomotive Works ..... 60

Texas Company, The ..... 2
Tide Water Associated Oil Company ..... 63
Timken Roller Bearing Company, The Front Cover

Union Carbide and Carbon Corporation, The Oxweld Railroad Service Company.. 47
Union Switch & Signal Company ..... 6

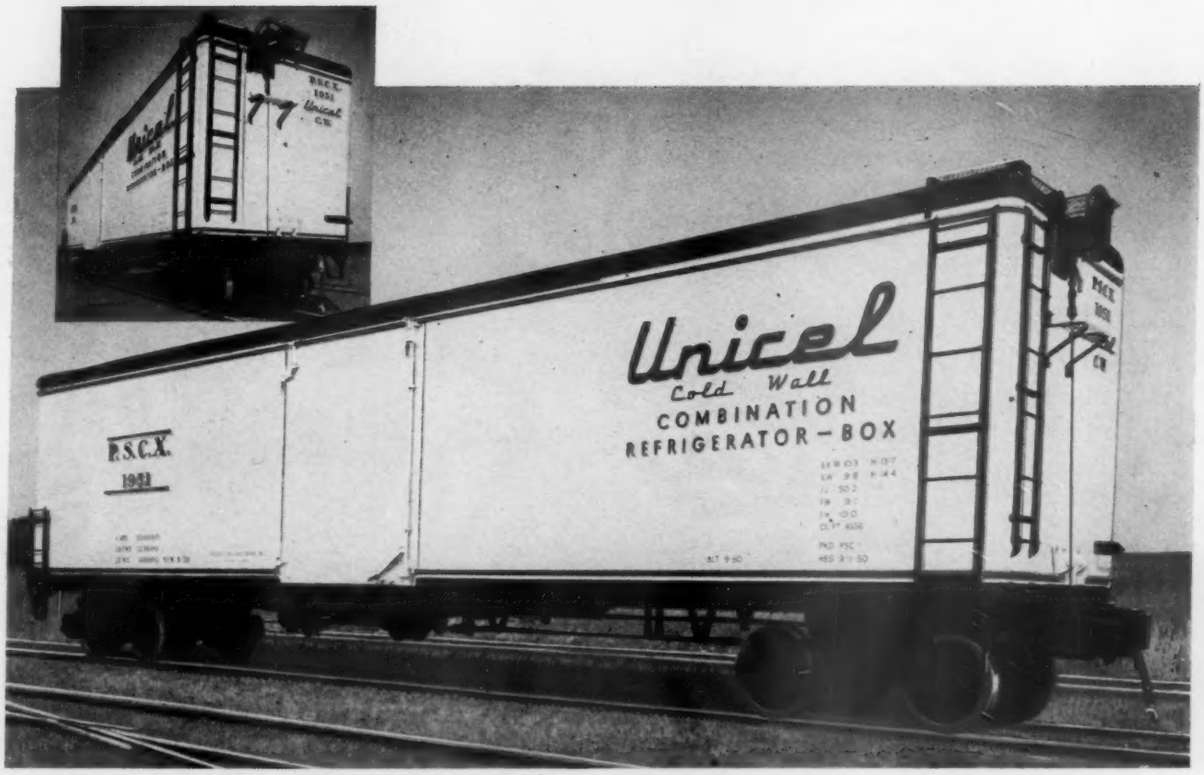
Westinghouse Air Brake Co. ..... 4
Westinghouse Electric Corporation .....42, 43



CHICAGO **STEEL SERVICE** COMPANY

Ashland Avenue at 39th Street • Chicago 9, Illinois • Telephone Lafayette 3-7210

**Complete Service in Carbon And Stainless Steels**




# New "UNICEL" refrigerator boxcar bids for America's farm-goods shipping in red, white and blue "DULUX" colors

**Embodying latest** engineering concepts in the use of cellular laminates, Pressed Steel Car Company's new "Unicel" Combination Refrigerator Boxcar promises advantages over conventional refrigerator cars and boxcars . . . should help railroads win more farm-goods shipping and other high-rated freight.

To give the new "Unicel" car the up-to-the-minute appearance that shippers so often associate with up-to-the-minute freight service, a complete "system" of Du Pont Railroad Finishes has been used—with red, white and blue DULUX top-coats.

Today, more and more freight cars are being finished with Du Pont DULUX Railroad Finishes—for good looks, for economy. From long experience, railroad men have learned that DULUX can't be surpassed in its resistance to smoke, fumes, cinders, hard knocks and weathering . . . that DULUX holds its full gloss and color for months on the road. It pays off in reduced maintenance costs. And it pays off by helping freight cars make the *right* impression on shippers wherever they go! E. I. du Pont de Nemours & Co. (Inc.), Finishes Div., Wilmington 98, Delaware.

**85% of America's leading railways* use DUCO lacquer or DULUX enamel on passenger-train equipment.**

. . . conclusive proof that the nation's railroads depend on the exceptional qualities of Du Pont DUCO and DULUX Railroad Finishes: outstanding durability and sparkling beauty with a minimum of maintenance.

**Includes Class 1 lines operating 100 or more passenger-train cars.*

DU PONT
REG. U. S. PAT. OFF.
BETTER THINGS FOR BETTER LIVING
. . . THROUGH CHEMISTRY

**DUCO-DULUX**
REG. U. S. PAT. OFF. REG. U. S. PAT. OFF.
**Railroad Finishes**

FOUNDED IN 1850

# ABSOLUTE PERMISSIVE BLOCK SIGNALING INCREASES TRACK CAPACITY

Your G-R-S district office will furnish you studies and estimates without obligation.

GENERAL RAILWAY SIGNAL COMPANY

New York 17 Chicago 3 ROCHESTER 2, N.Y. St. Louis 1 A-2444